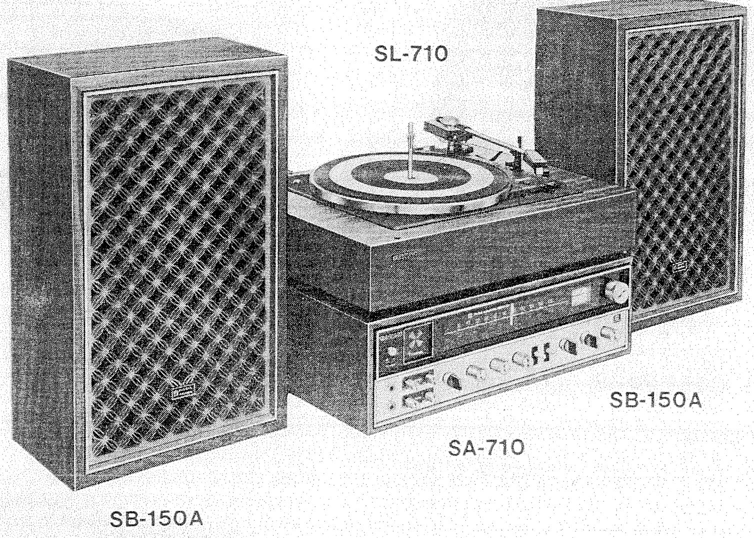
Service Manual

NATIONAL
STEREO
PANASONIC



MODEL SS-7100

SPECIFICATIONS

FM TUNER SECTION	
Frequency Range :	87.5 MHz～108 MHz
Sensitivity (IHF) :	2.5 μV
Image Ratio :	45 dB (at 98 MHz)
Stereo Separation :	38 dB (30% 60 dB 1 kHz)
S/N Ratio :	62 dB (100% 60 dB 1 kHz)
Distortion :	0.4% (30% 60 dB 1 kHz)
Filters :	SCA Filter & 38 kHz Filter
Antenna :	300 Ω Balanced
AM SECTION	
Frequency Range :	MW 525 kHz～1605 kHz
Sensitivity (IHF) :	MW 18 μV
Image Ratio :	MW 50 dB (at 1 MHz)
Antenna :	Built-in Ferrite Bar ANT.
AUDIO SECTION	
Circuit :	Quasi Complementary, ITL-OTL-OCL
Power Output (PMPO) :	80 W (20 W ×4) at 4 Ω
Power Band Width :	25 Hz～30 kHz (−3 dB CPO)
Residual Hum :	Less than 1 mV
Input Sens. & S/N :	Phono 3 mV (100 kΩ) Tape 300 mV (50 kΩ)
Tape Output (REC Out) :	Pin 120 mV (10 kΩ)
Tone Control Bass :	+10 dB −10 dB (100 Hz)
Treble :	+10 dB −10 dB (10 kHz)
Loudness Control :	+ 9 dB (100 Hz) +3 dB (10 kHz)
SPEAKER SECTION	SB-150A
System :	2-way 2-sp.
Impedance :	8 Ω
Woofer :	16cm ($6\frac{1}{2}''$) SAS16PL001S Corn Type
Tweeter :	6.5cm ($2\frac{1}{2}''$) EAS65PH34SD Corn Type
Cross Over Freq. :	8 kHz
PLAYER SECTION	MODEL SL-710 (CHANGER UNIT SP-910C)
Drive :	Rim Drive
Motor :	4-Pole Induction
Turntable :	28cm 11 inch
Cartridge :	EPC-82SMBD M.M
Stylus :	EPS-31STSD (Diamond)
Stylus Pressure :	3.5 g (Adjustable)
T.T Speed :	$33\frac{1}{3}$, 45, 78 RPM 3-Speed
POWER SUPPLY :	100～115, 115～130, 200～225, 225～250V
POWER CONSUMPTION :	62 W
WEIGHT Total :	27.6 kg 61 lb. 5 oz.
Receiver :	9.9 kg 21 lb. 13 oz.
Player :	8.5 kg 18 lb. 12 oz.
Speaker (each) :	4.7 kg 10 lb. 6 oz.
DIMENSIONS (W × H × D)	
Receiver :	$18\frac{7}{16}'' \times 6'' \times 15\frac{9}{16}''$ (469mm × 152mm × 395mm)
Player :	$18\frac{7}{16}'' \times 8\frac{1}{16}'' \times 14''$ (469mm × 205mm × 355mm)
Speaker :	$11\frac{11}{16}'' \times 18\frac{3}{8}'' \times 6\frac{3}{4}''$ (297mm × 467mm × 172mm)

(Specifications subject to change without notice.)

MATSUSHITA ELECTRIC
MATSUSHITA ELECTRIC TRADING CO., LTD.
P. O. Box 288, Central Osaka, Japan

ORDER NO. SD-363

DISASSEMBLY INSTRUCTIONS

■ TO REMOVE RECORD CHANGER (Refer to fig. 1 and 2)

1. Remove ten (10) bottom board screws, nos. 1~10.
2. Remove bottom board from cabinet.
3. Remove two (2) plugs from record changer.
4. Turn one (1) spring clip.
5. Remove record changer from cabinet.

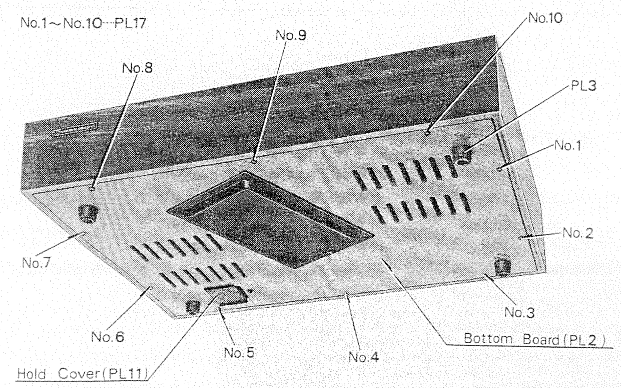

No.1~No.10···PL17
No.9
No.10
No.8
PL3
No.1
No.2
No.7
No.3
No.6
Bottom Board (PL2)
No.5
No.4
Hold Cover (PL11)

Fig. 1

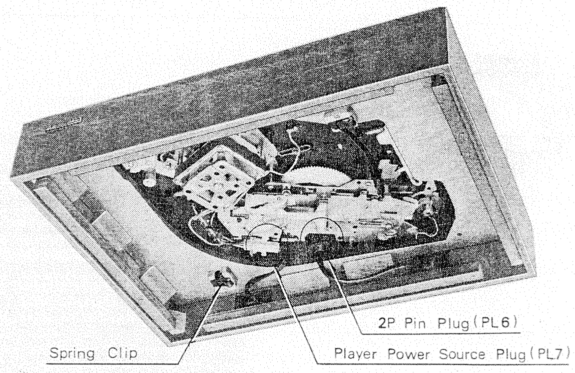

2P Pin Plug (PL6)
Spring Clip
Player Power Source Plug (PL7)

Fig. 2

■ TO REMOVE CHASSIS (Refer to fig. 3)

1. Remove six (6) screws.
2. Remove chassis from cabinet in arrow direction.

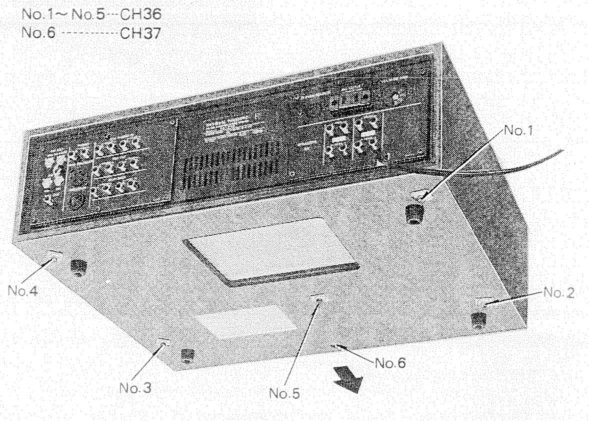

No.1~No.5···CH36
No.6 ··········CH37
No.1
No.4
No.2
No.6
No.3
No.5

Fig. 3

DIAL CORD STRINGING GUIDE

NOTES:

1. Dial cord length is 80"
2. Tuning gang is positioned at maximum capacity
3. Arrow marks (1-12) indicate correct order and direction of stringing dial cord.
4. Cement dial cord ends.

TO MOUNT DIAL POINTER

1. Set tuning gang to fully closed position.
2. Set dial pointer to start point of dial scale.
3. Attach dial cord to dial pointer.

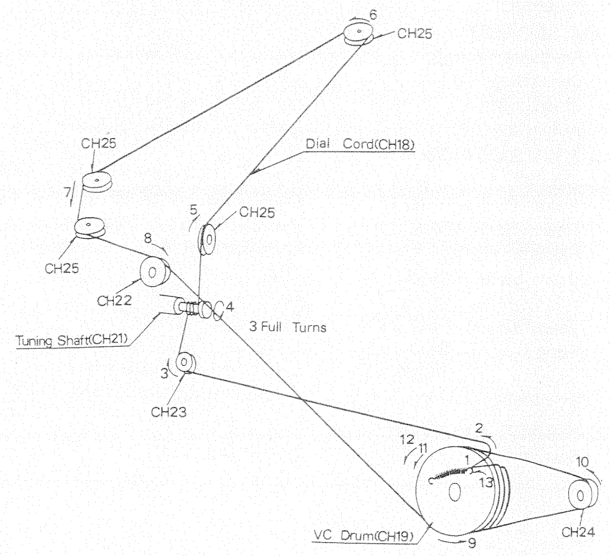

6
CH25
CH25
Dial Cord(CH18)
7
5
CH25
8
CH25
CH22
4
3 Full Turns
Tuning Shaft(CH21)
3
CH23
2
12
11
1
13
10
VC Drum(CH19)
9
CH24

Fig. 4

LOCATION OF PARTS

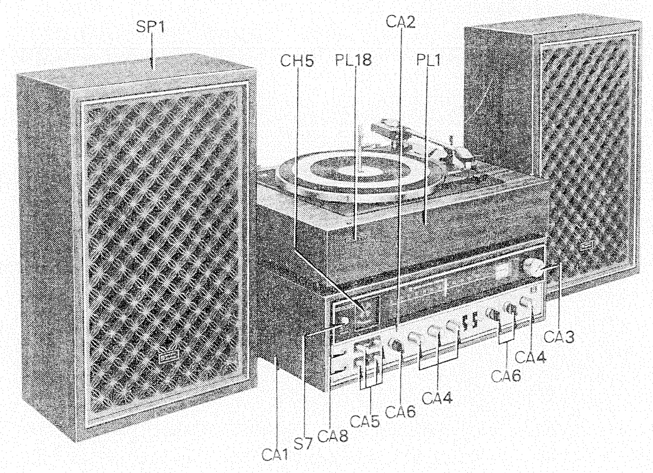


Fig. 5

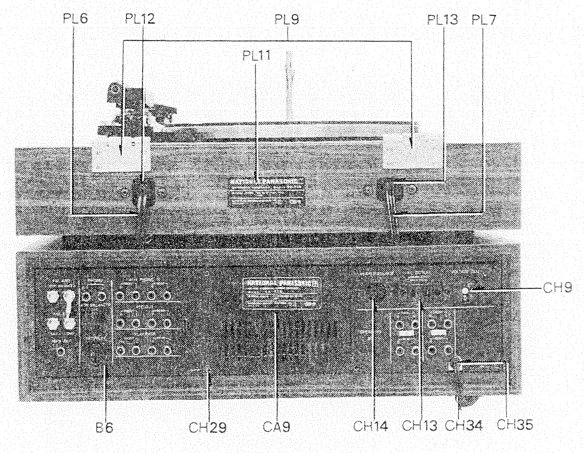


Fig. 6

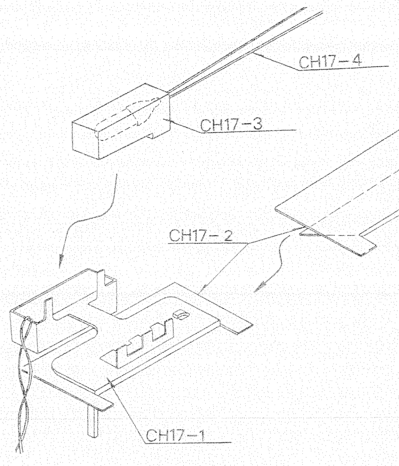


Fig. 7

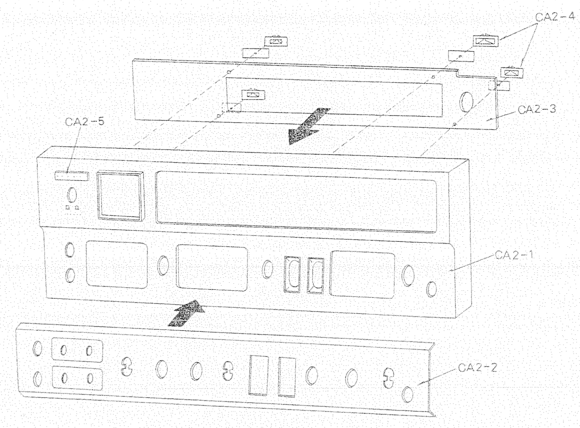


Fig. 8

SCHEMATIC DIAGRAM (CHANGER UNIT SP-910C)

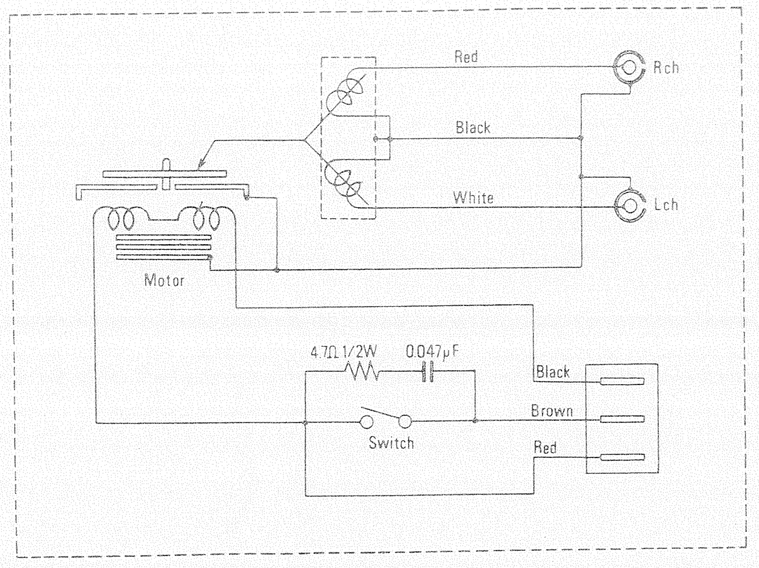


Fig. 9

ALIGNMENT INSTRUCTIONS

FREQUENCY & DISTANCE ON DIAL SCAL

To accurately align the proper frequencies to the dial scale, refer to Table and mark the edge of the dial scale plate accordingly, using the "Start Point" mark on the dial scale as a reference point.

TABLE

Band	Frequency	Distance from "Start Point"	
AM	550 kHz	17.1 mm	$\frac{11}{16}''$
	1500 kHz	159.9 mm	$6\frac{5}{16}''$
FM	90 MHz	22.3 mm	$\frac{7}{8}''$
	106 MHz	151.0 mm	$5\frac{15}{16}''$

1. AM/FM-IF & RF ALIGNMENT

AM-IF & RF ALIGNMENT (Refer to Fig. 10 and 11)

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455 kHz (400 Hz Mod.)	Point of noninterference. (on/about 600 kHz)	Output meter across EXT Speaker Jack (L).	T203	Adjust for maximum output.
2	〃	550 kHz (400 Hz Mod.)	550 kHz	〃	L202 (OSC Coil) L801 (ANT Coil)	Adjust for maximum output by sliding coil(L801) along ferrite core.
3	〃	1500 kHz (400 Hz Mod.)	1500 kHz	〃	C134 (OSC Trimmer) C131 (ANT Trimmer)	Adjust for maximum output. Repeat steps (2) and (3).

Notes: 1. Cement antenna bobbin with wax after completing alignment.
2. Make certain that speaker system is connected to the turne when alignment.

FM-IF AND DETECTOR ALIGNMENT WITH OSCILLOSCOPE (Refer to Fig. 10)

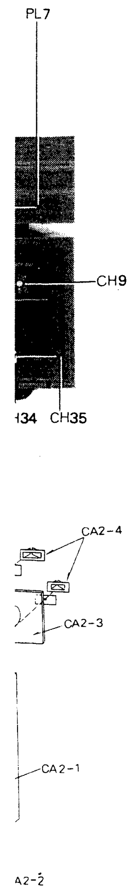
STEP	SWEEP GENERATOR COUPLING	RADIO DIAL	INDICATOR	ADJUST	REMARKS
1	High side thru. 0.001 F to point TP101 terminal. Common to chassis.	Point of non-interference (ON/about 89 MHz)	Connect vert. amp. of scope thru. electrolytic capacitor (25V 0.1μF) to point TP203. Common to chassis.	T101 (FM 1st IFT)	Adjust T.01 of primary for maximum amplitude.
2				T201 (FM 2nd IFT)	Adjust T201 for maximum amplitude and symmertrical curve. (Refer to Fig. A)
3			Connect vert. amp. of scope to point TP204. Common to chassis.	T202 (Disc.)	Adjust T202 so that proper linearity between 100 kHz (Refer to Fig. B)

Note: Remove line cord antenna from FM external terminal when aligning.

FM-RF ALIGNMENT (Refer to Fig. 11)

STEP	SIGNAL SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	Connect to EXT FM antenna terminal through FM dummy antenna Common to ahassis.	90 MHz (400 Hz Mod.)	90 MHz	Output meter across EXT Speaker Jack (L).	L104 (FM OSC Coil) L101 (FM ANT Coil) L102 (FM Detector Coil)	Adjust for maximum output.
2	〃	106 MHz (400 Hz Mod.)	106 MHz	〃	C119 (FM OSC Trimmer) C102 (FM ANT Trimmer) C109 (FM Detector Trimmer)	Adjust for maximum output Repeat steps (1) and (2).

Note: As three output responses will be present proper tuning is the center frequency.



-910C)

ALIGNMENT INSTRUCTIONS

FREQUENCY & DISTANCE ON DIAL SCAL

To accurately align the proper frequencies to the dial scale, refer to Table and mark the edge of the dial scale plate accordingly, using the "Start Point" mark on the dial scale as a reference point.

TABLE

Band	Frequency	Distance from "Start Point"	
AM	550 kHz	17.1 mm	11/16″
	1500 kHz	159.9 mm	6 5/16″
FM	90 MHz	22.3 mm	7/8″
	106 MHz	151.0 mm	5 15/16″

1. AM/FM-IF & RF ALIGNMENT

AM-IF & RF ALIGNMENT (Refer to Fig. 10 and 11)

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455 kHz (400 Hz Mod.)	Point of noninterference. (on/about 600 kHz)	Output meter across EXT Speaker Jack (L).	T203	Adjust for maximum output.
2	〃	550 kHz (400 Hz Mod.)	550 kHz	〃	L202 (OSC Coil) L801 (ANT Coil)	Adjust for maximum output by sliding coil(L801) along ferrite core.
3	〃	1500 kHz (400 Hz Mod.)	1500 kHz	〃	C134 (OSC Trimmer) C131 (ANT Trimmer)	Adjust for maximum output. Repeat steps (2) and (3).

Notes: 1. Cement antenna bobbin with wax after completing alignment.
2. Make certain that speaker system is connected to the turne when alignment.

FM-IF AND DETECTOR ALIGNMENT WITH OSCILLOSCOPE (Refer to Fig. 10)

STEP	SWEEP GENERATOR COUPLING	RADIO DIAL	INDICATOR	ADJUST	REMARKS
1	High side thru. 0.001 F to point TP101 terminal. Common to chassis.	Point of non-interference (ON/about 89 MHz)	Connect vert. amp. of scope thru. electrolytic capacitor (25V 0.1μF) to point TP203. Common to chassis.	T101 (FM 1st IFT)	Adjust T₋01 of primary for maximum amplitude.
2				T201 (FM 2nd IFT)	Adjust T201 for maximum amplitude and symmertrical curve. (Refer to Fig. A)
3			Connect vert. amp. of scope to point TP204. Common to chassis.	T202 (Disc.)	Adjust T202 so that proper linearity between 100 kHz (Refer to Fig. B)

Note: Remove line cord antenna from FM external terminal when aligning.

FM-RF ALIGNMENT (Refer to Fig. 11)

STEP	SIGNAL SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	Connect to EXT FM antenna terminal through FM dummy antenna Common to ahassis.	90 MHz (400 Hz Mod.)	90 MHz	Output meter across EXT Speaker Jack (L).	L104 (FM OSC Coil) L101 (FM ANT Coil) L102 (FM Detector Coil)	Adjust for maximum output.
2	〃	106 MHz (400 Hz Mod.)	106 MHz	〃	C119 (FM OSC Trimmer) C102 (FM ANT Trimmer) C109 (FM Detector Trimmer)	Adjust for maximum output Repeat steps (1) and (2).

Note: As three output responses will be present proper tuning is the center frequency.

2. FM-STEREO ALIGNMENT (Refer to Fig. 10)

SCA FILTER ALIGNMENT

EQUIPMENT CONNECTION		ADJUSTMENT	REMARKS
AF OSCILLATOR COUPLING	OSCILLOSCOPE		
67 kHz Connect to EXT. FM signal generator terminal.	Connect vert. amp. of scope to point TP301. Common to chassis.	L301 (67 kHz Filter Coil)	Adjust for minimum oscilloscope pattern.

19 kHz AMP. and LIGHTING LEVEL ALIGNMENT

EQUIPMENT CONNECTION		ADJUST	REMARKS
SIGNAL GENERATOR	OSCILLOSCOPE		
Connect to EXT. FM antenna terminal through Dummy antenna.	Connect vert Amp. of scope to point TP302 Common to chassis.	L301 (19 kHz Pick-up Coil) L303 (38 kHz Coil)	Adjust L301, L303 for maximum oscilloscope pattern of 38 kHz.

ALIGNMENT CIRCUIT	ADJUSTMENT	REMARKS
LIGHTING LEVEL (Muting Level)	R317	Adjust R317 for the lighting level on SG is 22 dB.

38 kHz SUB CHANNEL CARRIER LEAK ALIGNMENT

EQUIPMENT CONNECTION		ADJUST	REMARKS
RIGNAL GENERATOR	OSCILLOSCOPE		
Connect to EXT. FM antenna terminal through Dummy antenna.	Connect vert. Amp. of scope to point TP303. Common to chassis.	R302 (38 kHz Sub Ch. Carrier Leak Control)	Adjust for minimum oscilloscope pattern.

SEPARATION ALIGNMENT

ALIGNMENT CIRCUIT	ADJUSTMENT	REMARKS
SEPARATION	R304, L303	Adjust R304 and L303 for the minimum indication on VTVM from the right side output when the left side of stereo modulator is modulated. Adjust R304 and L303 in the same way for the right side.

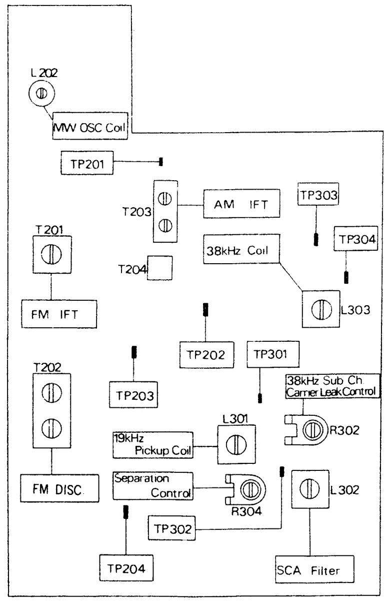
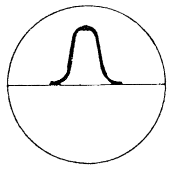
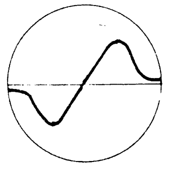


Fig. 10



A



B

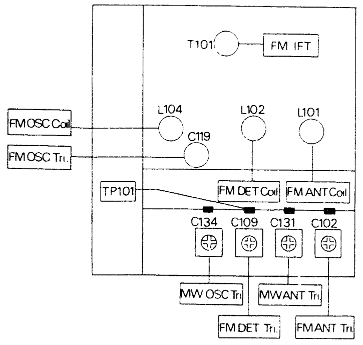
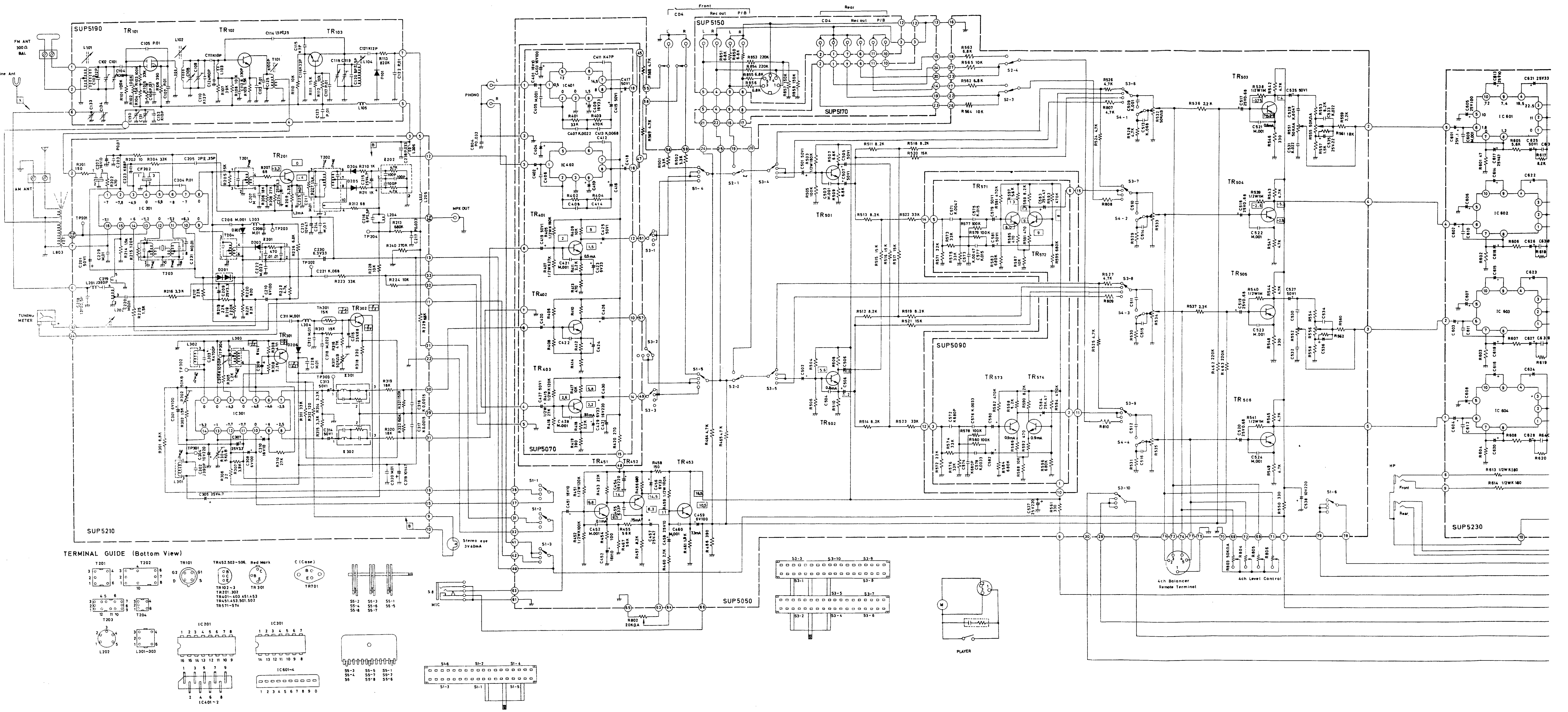
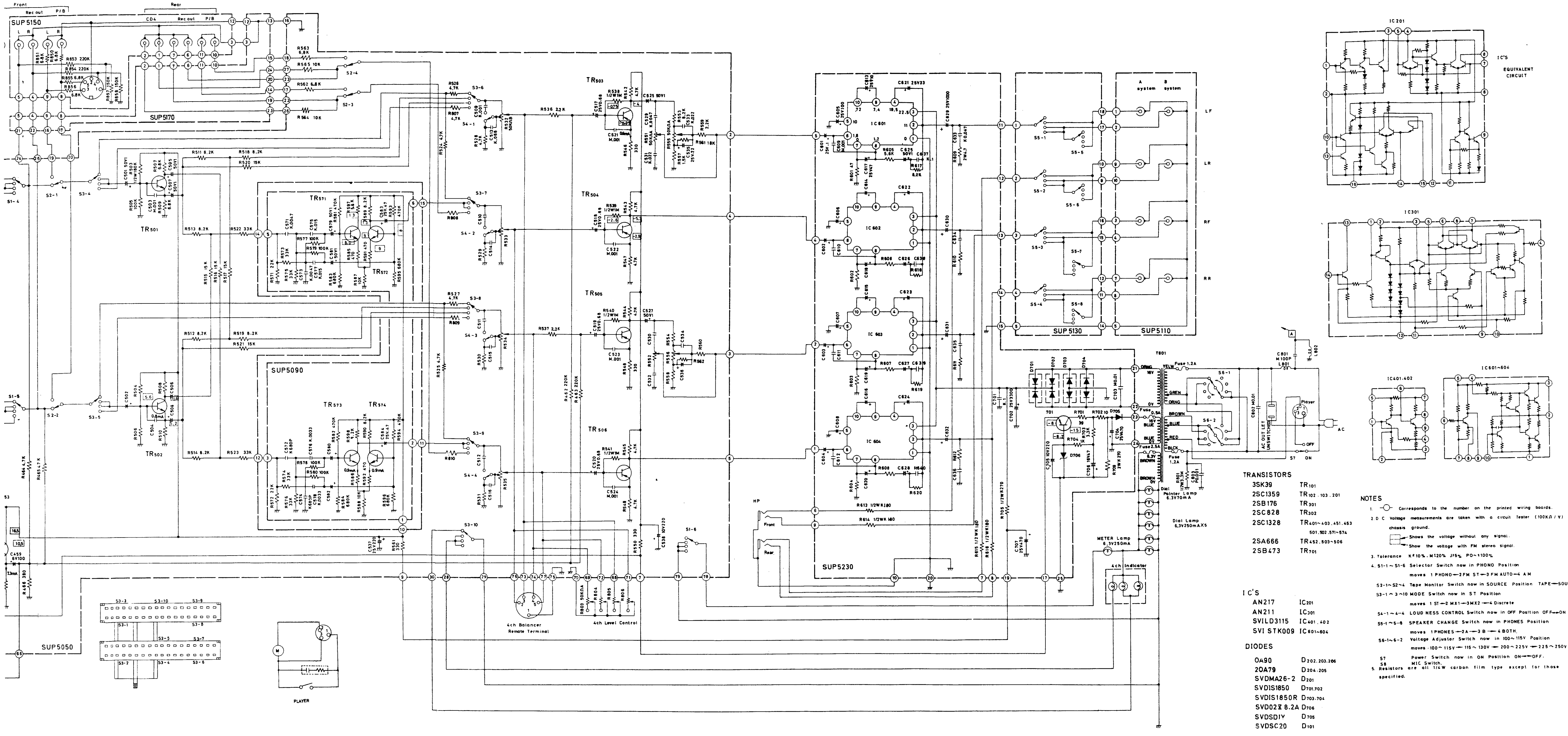


Fig. 11

SCHEMATIC DIAGRAM MODEL SS-7100


SUP5190
SUP5210
SUP5070
SUP5050
SUP5150
SUP5170
SUP5090
SUP5230
FM ANT 300Ω BAL
Line Ant
AM ANT
TUNING METER
PHONO
MPX OUT
MIC
Stereo eye 3V40mA
Front
Rear
Rec out
P/B
CD4
HP
4ch Balancer Remote Terminal
4ch Level Control
PLAYER
TERMINAL GUIDE (Bottom View)
TR101
TR102
TR103
TR201
TR301
TR302
TR401
TR402
TR403
TR451
TR452
TR453
TR501
TR502
TR503
TR504
TR505
TR506
TR571
TR572
TR573
TR574
TR701
IC201
IC301
IC401
IC402
IC601
IC602
IC603
IC604
IC401~2
IC601~4
T201
T202
T203
T204
L202
L301~303
TR452,503~506, Red Mark
TR103~3, TR201,302, TR401~403,451,453, TR451,453,501,502, TR571~574
C (Case)
S1-1
S1-2
S1-3
S1-4
S1-5
S1-6
S2-1
S2-2
S2-3
S2-4
S3-1
S3-2
S3-3
S3-4
S3-5
S3-6
S3-7
S3-8
S3-9
S3-10
S4-1
S4-2
S4-3
S4-4
S5-1
S5-2
S5-3
S5-4
S5-5
S5-6
S5-7
S5-8


Front
Rear
Rec out
P/B
CD4
SUP5150
SUP5170
SUP5090
SUP5230
SUP5130
SUP5110
SUP5050
TR501
TR502
TR503
TR504
TR505
TR506
TR571
TR572
TR573
TR574
IC601
IC602
IC603
IC604
A system
B system
LF
LR
RF
RR
HP
T801
D701
D702
D703
D704
D705
D706
Fuse 1.2A
Fuse 0.5A
Fuse 2.5A
Fuse 1.2A
Dial Lamp 6.3V250mA×5
Pointer Lamp 6.3V70mA
METER Lamp 6.3V250mA
4ch Indicator
4ch Balancer Remote Terminal
4ch Level Control
PLAYER
AC OUT LET UNSWITCHED
AC
S7
ON
OFF
IC201
IC'S EQUIVALENT CIRCUIT
IC301
IC401.402
IC601~604

TRANSISTORS

3SK39	TR101
2SC1359	TR102 . 103 . 201
2SB176	TR301
2SC828	TR302
2SC1328	TR401~403 . 451 . 453 501 . 502 . 571~574
2SA666	TR452 . 503~506
2SB473	TR701

I C'S

AN217	IC201
AN211	IC301
SVILD3115	IC401 . 402
SVI STK009	IC601~604

DIODES

OA90	D202. 203. 206
2OA79	D204 . 205
SVDMA26-2	D201
SVDIS1850	D701. 702
SVDIS1850R	D703. 704
SVD02Ⅹ 8.2A	D706
SVDSDIY	D705
SVDSC20	D101

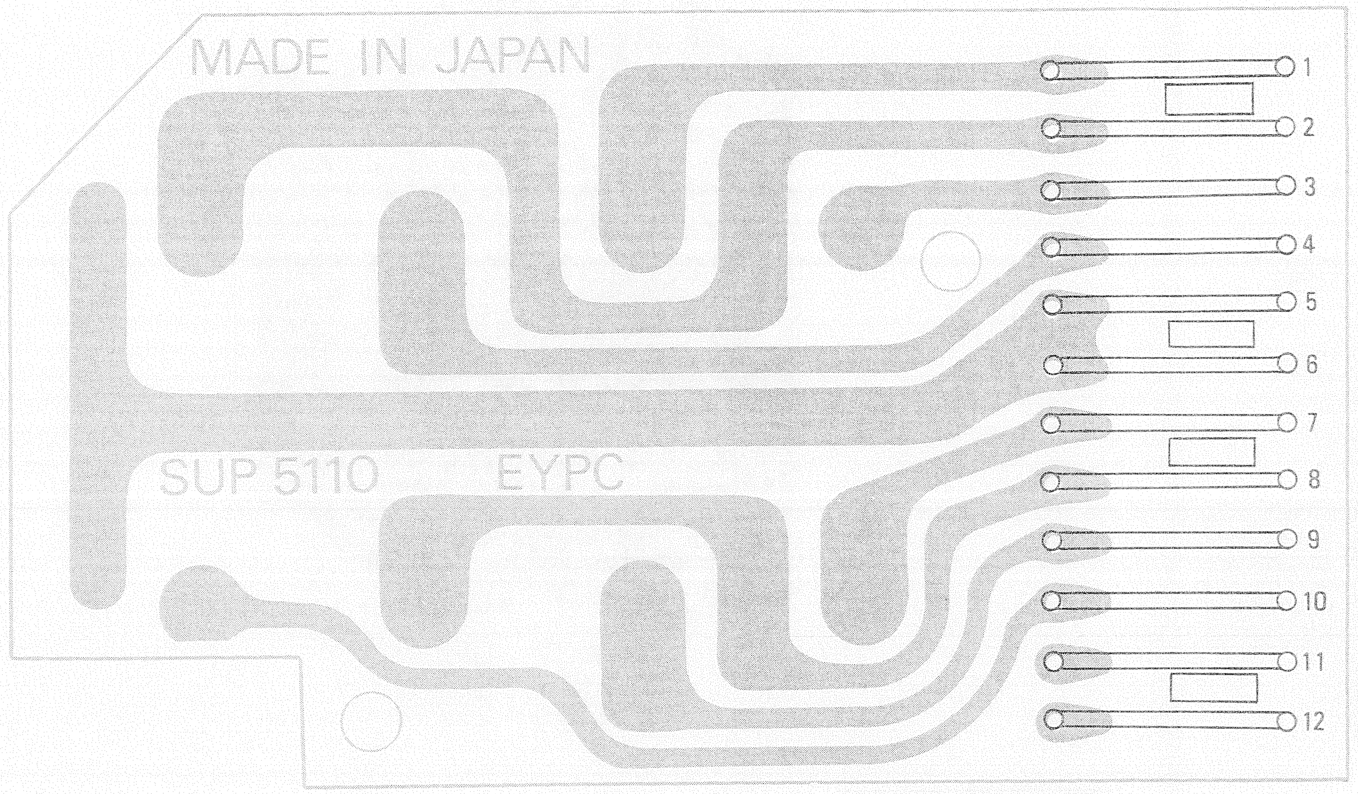
NOTES

1. —○— Corresponds to the number on the printed wiring boards.
2. D C Voltage measurements are taken with a circuit Tester (100KΩ / V) from chassis ground.
   ▭ Shows the voltage without any signal.
   ▭ Show the voltage with FM stereo signal.
3. Tolerance K±10% . M±20% J±5% PO~±100%
4. S1-1 ~ S1-6 Selector Switch now in PHONO Position
   moves 1 PHONO←2FM ST←3 FM AUTO←4 AM
   S2-1~S2~4 Tape Monitor Switch now in SOURCE Position TAPE←SOURCE
   S3-1 ~ 3 ~10 MODE Switch now in ST Position
   moves 1 ST←2 MX1←3MX2 ←4 Discrete
   S4-1 ~ 4-4 LOUD NESS CONTROL Switch now in OFF Position OFF↔ON
   S5-1 ~ 5-8 SPEAKER CHANGE Switch now in PHONES Position
   moves 1PHONES←2A←3 B ←4 BOTH.
   S6-1~6-2 Voltage Adjustor Switch now in 100~115V Position
   moves ·100~115V← 115~130V ← 200~225V ←225~250V.
   S7 Power Switch now in ON Position ON↔OFF.
   S8 MIC Switch.
5. Resistors are all 1/4W carbon film type except for those specified.

CIRCUIT BOARD MODEL SS-7100

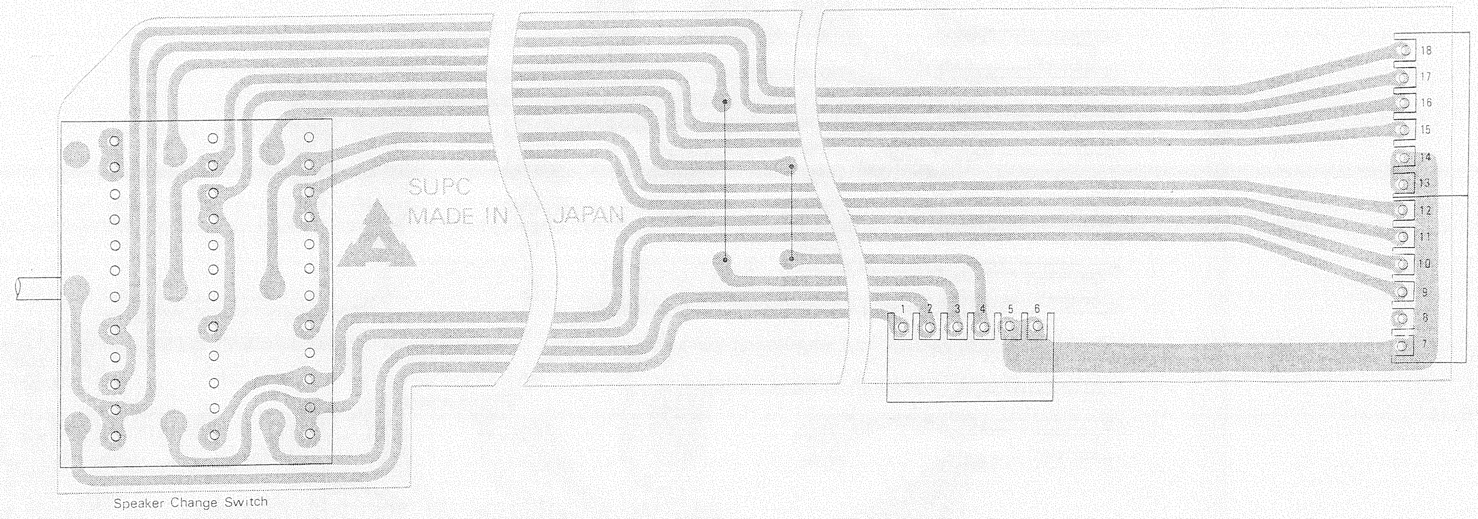
SPEAKER CONNECTION

Part No. SXP1111 (B8)


MADE IN JAPAN
SUP 5110
EYPC
1
2
3
4
5
6
7
8
9
10
11
12

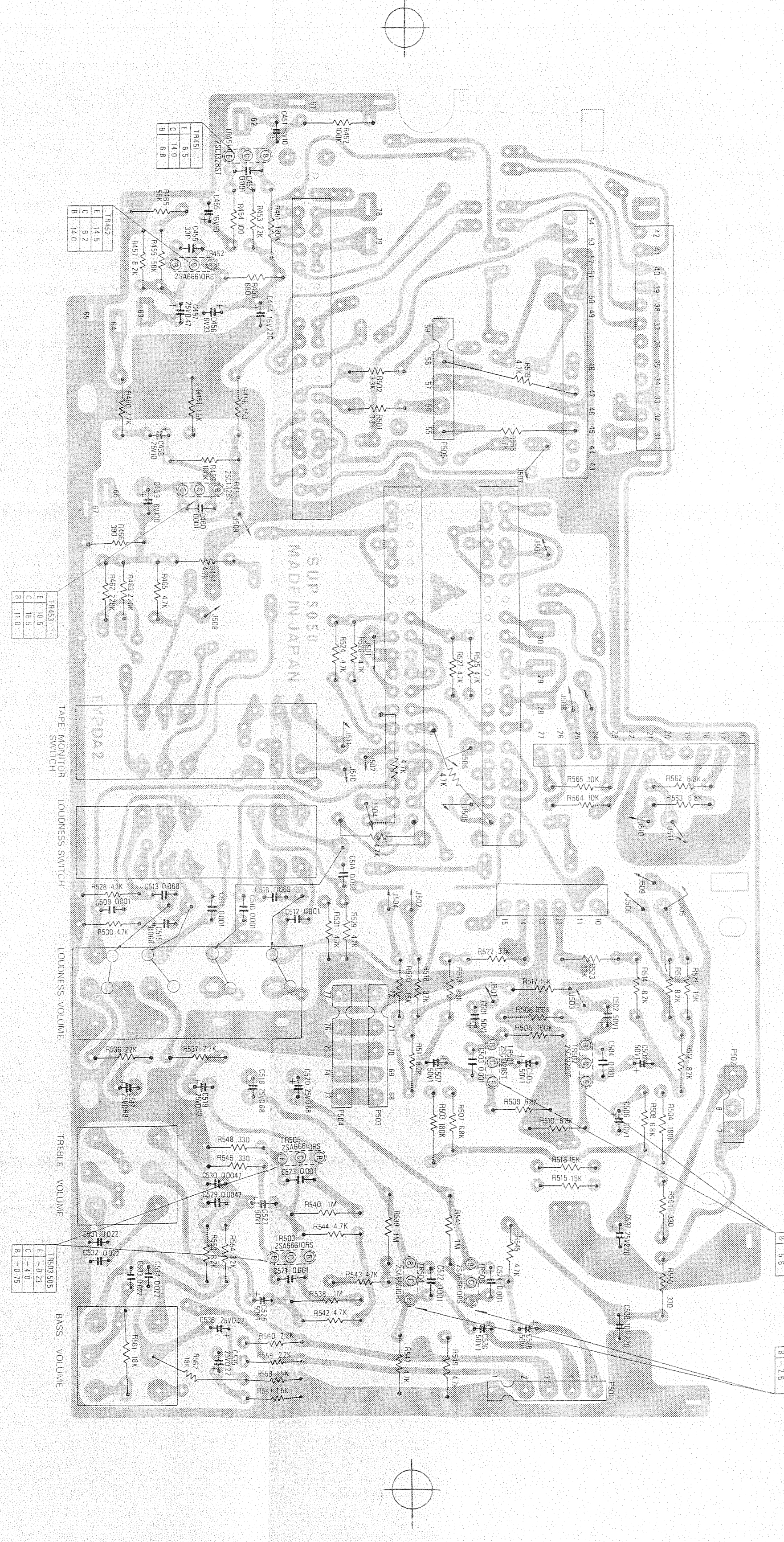
SPEAKER CONNECTION

Part No. SXP1113 (B9)


SUPC
MADE IN JAPAN
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
Speaker Change Switch

CONTROL AMP

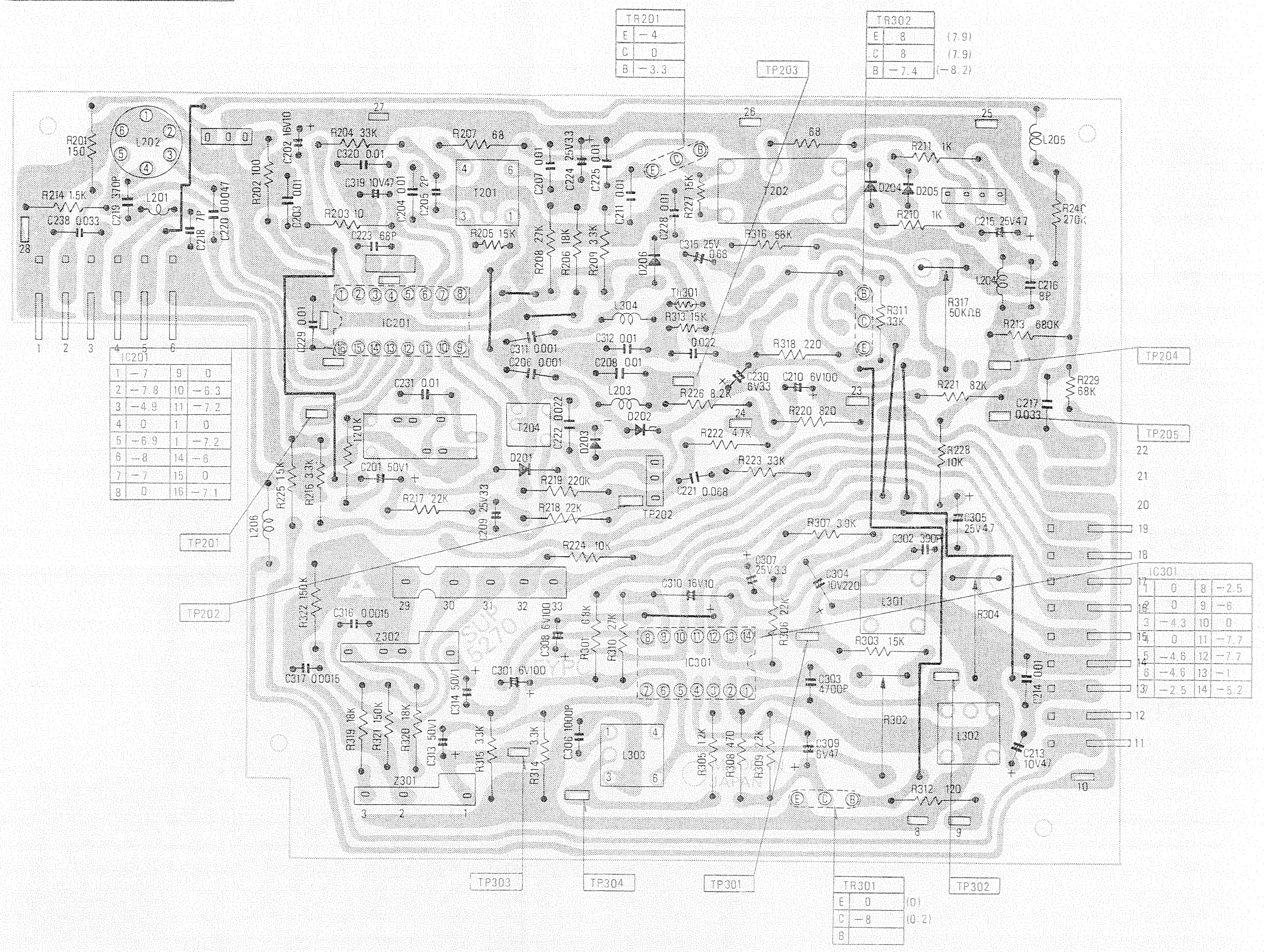
Part No. SXP1103 (B4)


SUP 5050
MADE IN JAPAN
EYPDA2
TAPE MONITOR SWITCH
LOUDNESS SWITCH
LOUDNESS VOLUME
TREBLE VOLUME
BASS VOLUME

CIRCUIT BOARD MODEL SS-7100

IF and MPX

Part No. SXP1097 (B1)


TP201
TP202
TP203
TP204
TP205
TP301
TP302
TP303
TP304
IC201
IC301
T201
T202
T204
L201
L202
L203
L204
L205
L206
L301
L302
L303
Z301
Z302
EYPC

TR201	
E	−4
C	0
B	−3.3

TR302		
E	8	(7.9)
C	8	(7.9)
B	−7.4	(−8.2)

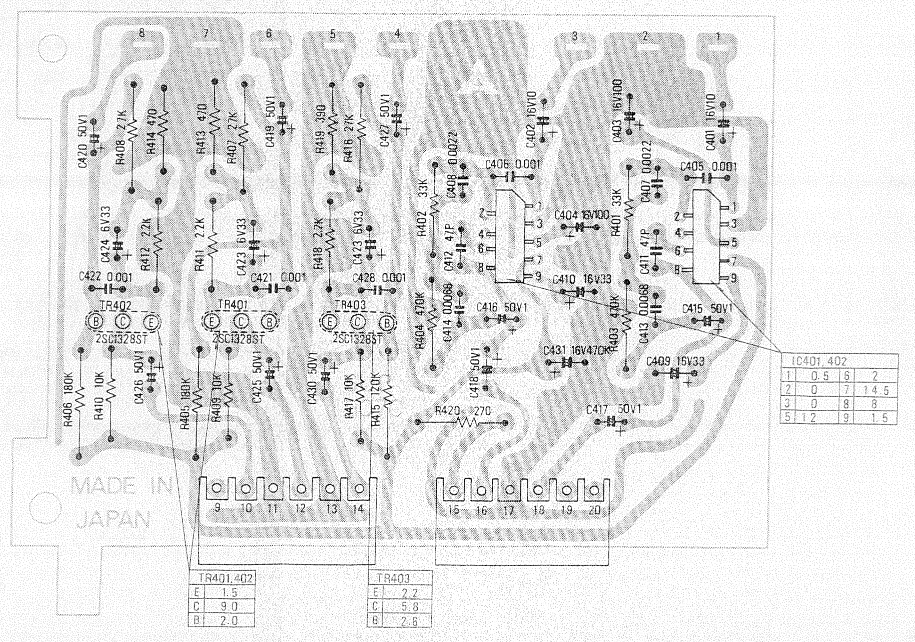
TR301		
E	0	(0)
C	−8	(0.2)
B		

IC201			
1	−7	9	0
2	−7.8	10	−6.3
3	−4.9	11	−7.2
4	0	1	0
5	−6.9	1	−7.2
6	−8	14	−6
7	−7	15	0
8	0	16	−7.1

IC301			
1	0	8	−2.5
2	0	9	−6
3	−4.3	10	0
4	0	11	−7.7
5	−4.6	12	−7.7
6	−4.6	13	−1
7	−2.5	14	−5.2

PRE AMP

Part No. SXP1099 (B2)


TR401
TR402
TR403
2SC1328ST
MADE IN JAPAN

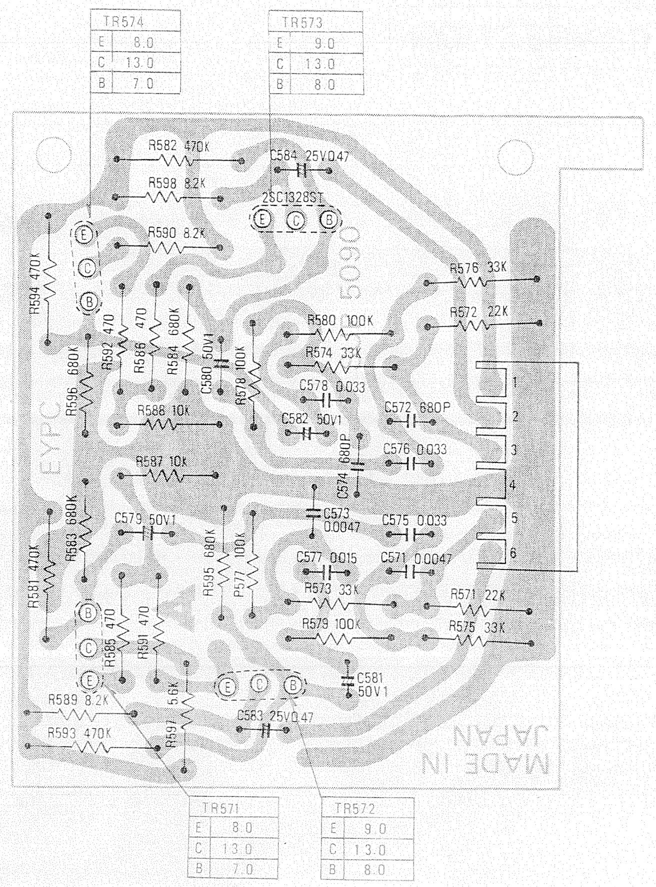
TR401,402	
E	1.5
C	9.0
B	2.0

TR403	
E	2.2
C	5.8
B	2.6

IC401, 402			
1	0.5	6	2
2	0	7	14.5
3	0	8	8
5	12	9	1.5

PHASE SHIFTER

Part No. SXP1101 (B3)


2SC1328ST
5090
EYPC
MADE IN JAPAN

TR574	
E	8.0
C	13.0
B	7.0

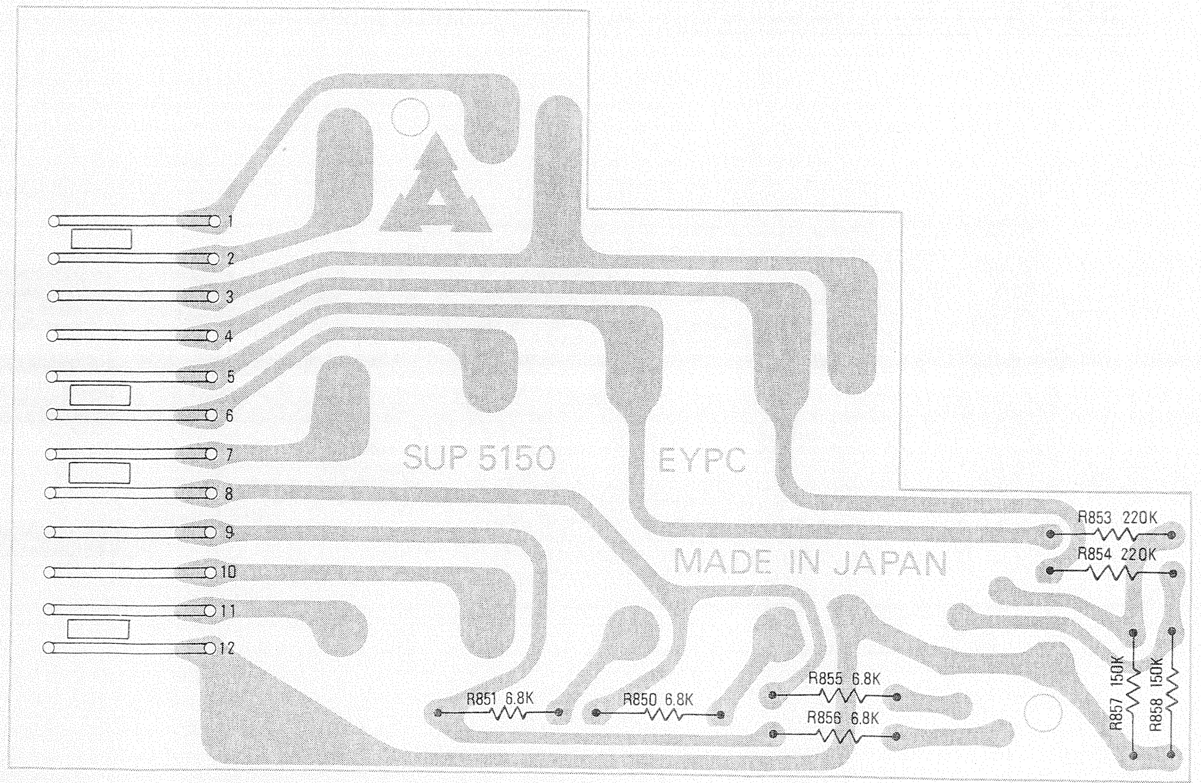
TR573	
E	9.0
C	13.0
B	8.0

TR571	
E	8.0
C	13.0
B	7.0

TR572	
E	9.0
C	13.0
B	8.0

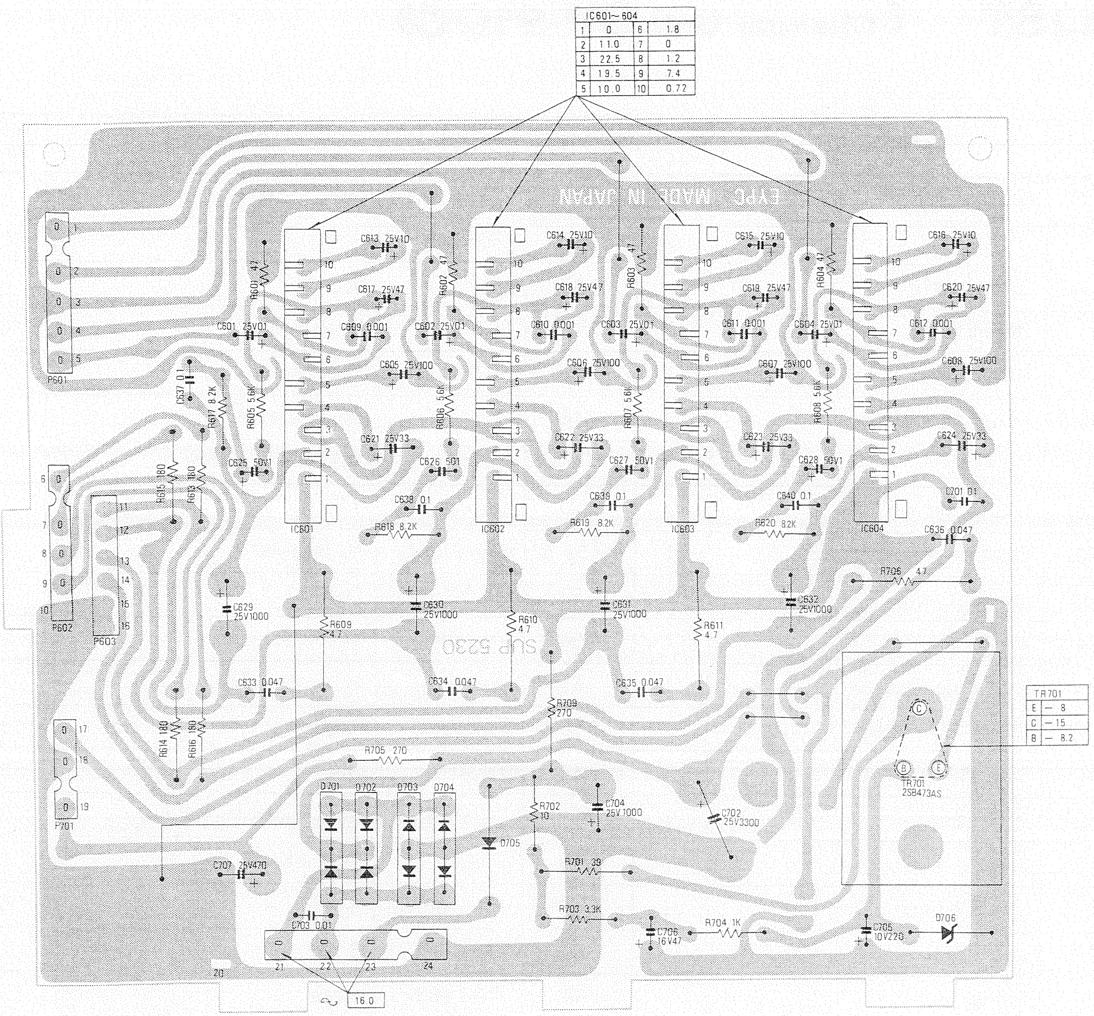
REAR PANEL

Part No. SXP1107 (B6)


SUP 5150
EYPC
MADE IN JAPAN
R853 220K
R854 220K
R851 6.8K
R850 6.8K
R855 6.8K
R856 6.8K
R857 150K
R858 150K

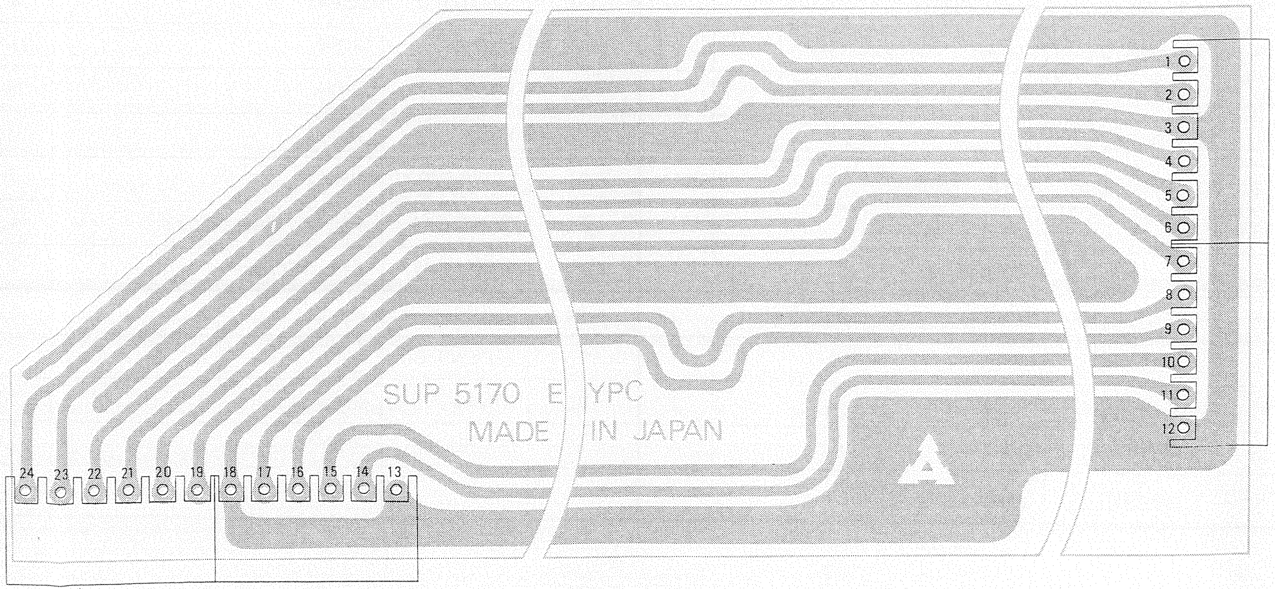
POWER SOURCE and POWER AMP

Part No. SXP1105 (B5)


IC601~604
1 0
2 11.0
3 22.5
4 19.5
5 10.0
6 1.8
7 0
8 1.2
9 7.4
10 0.72
EYPC MADE IN JAPAN
SUP 5230
IC601
IC602
IC603
IC604
P601
P602
P603
P701
TR701
E — 8
C — 15
B — 8.2
TR701 2SB473AS
D701
D702
D703
D704
D705
D706
C702 25V3300
C704 25V1000
C705 10V220
C706 16V47
C707 25V470
C703 0.01
R701 39
R702 10
R703 3.3K
R704 1K
R705 270
R706 4.7
R709 270
C629 25V1000
C630 25V1000
C631 25V1000
C632 25V1000
R609 4.7
R610 4.7
R611 4.7
C633 0.047
C634 0.047
C635 0.047
C636 0.047
R618 8.2K
R619 8.2K
R620 8.2K
16.0

SIGNAL CONNECTION

Part No. SXP1109 (B7)


SUP 5170 EYPC
MADE IN JAPAN
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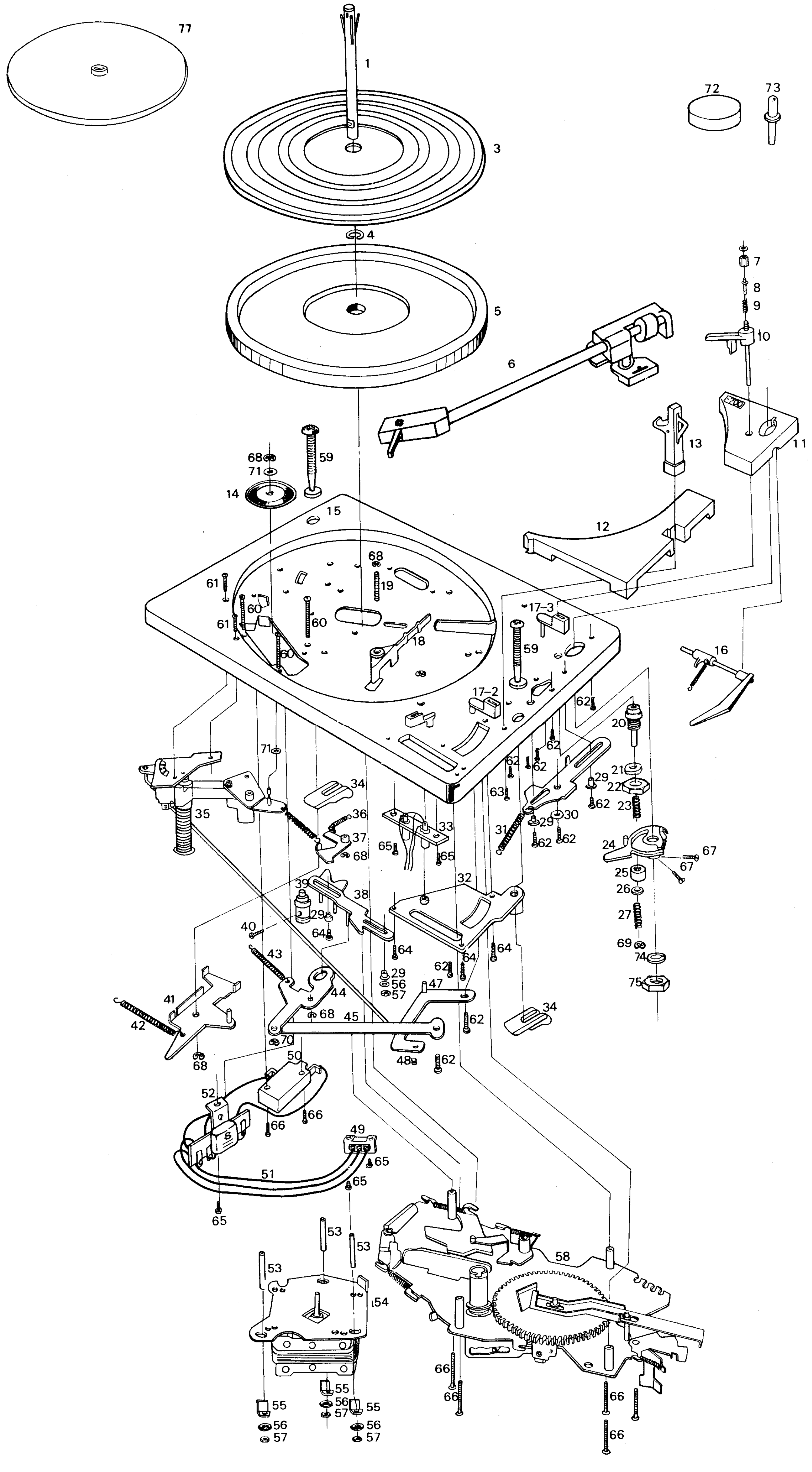
PARTS LIST (Changer Unit SP-910C)

Ref. No.	Part No.	Description	Per Set (Pcs.)	Ref. No.	Part No.	Description	Per Set (Pcs.)
1	SFVS910-1Z	Automatic Spindle	1	41	SFUP910-1E	Idler Off Lever	1
			1	42	SFQH910-1	Spring	1
3	SFTG910C1A	Turntable Mat	1	43	SFQH910-2	Spring	1
4	SFXT910-1	Stopper Ring	1	44	SFUP910-3E	Reject Rod B	1
5	SFTE910-1E	Turntable Ass'y	1	45	SFUP910-4E	Reject Rod A	1
6	EPU-36SMAD	Pickup Arm Ass'y	1	46	SFQS910-1	Speed Change Rod	1
7~10, 20	SFKR910-1A	Lift Ass'y	1	47, 48	SFUP910-5E	Speed Change Lever	1
11	SFKC910B01	Escutcheon Moulding, A	1	50	SFDSAM320039	Switch	1
12	SFKC913B01	Escutcheon Moulding, B	1	49, 51, 52	SFDA910A1	AC Plug Ass'y	1
13	SFKU913-1A	Arm Rest Ass'y	1	53	SFXO910A1	Collar	3
14	SFMI910A01E	Idler Wheel Ass'y	1	54	4M-15VPL	Motor Ass'y	1
15	SFBP913AA	Main Plate Ass'y	1	55	SFMF910-1	Motor Plate Ass'y	3
16	SFKT910-3E	Cueing Lever Ass'y	1	56	XWA4BFM	Washer	3
17-1, 17-2, 17-3	SFKT910A1	Speed Select Lever	1	57	XNG4HFU	Nut	3
18	SFUM910-2	Push Lever	1	58	SFUK910-1Z	Base Plate Complete Ass'y	1
19	SFXG910-1	Shaft	1	59	SFXG411-1	Transit Screw	2
21	XWA8BFX	Spring Washer	1	60	XSN3 +40FU	Screw	6
22	XNG8HFX	Nut	1	61	XTU3 +6BFU	Screw	2
23	SFQA910-5	Spring	1	62	XTN3 +8BFU	Screw	17
24, 67	SFUP910-6A	P.U. Control Lever Rivetting Ass'y	1	63	XTN3 +12BFU	Screw	1
25	SFXB910-7	Collar	1	64	XTN3 +10BFU	Screw	5
26	SFXW910-5	Washer	1	65	XTN3 +6BFU	Screw	5
27	SFQA910-4	Spring	1	66	XTN4 +30DFU	Screw	4
28	SFUM910-3	Selector Lever	1	67	XXA3D5FU	Screw	2
29	SFXW910-1	Washer	4	68	XUC3FY	Circlip	17
30	XWC4BFY	Washer	1	69	XUC2FY	Circlip	5
31	SFQH327-2	Spring	1	70	XUC4FY	Circlip	3
32	SFUM910-5	Knob, Slide Base	1	71	SFXW551D2	Washer	7
33	SJF3201-1	Pin Jack Recaptacle	1	72	SFVA910-10	45r.p.m. Manual Spindle	1
34	SFUP411-6	Retaining Clip	2	73	SFVS910-17	Manual Spindle	1
35	SFMT910-1A	Speed Change Base Plate Ass'y	1	74	XWB145BFY	Washer	1
36	SFQH831-2	Spring	1	75	SFP-EN9701	Nut	1
37	SFUP910-2E	Idler Off Latch	1	76	XTN4 +35BFU	Screw	1
38	SFUM910-1	Trip Lever	1	77	SFKD910A01Z	Balancer	1
39, 40	SFMC910 $^{-5}_{-6}$	Capstan (for 50 Hz) (for 60 Hz)	1				

EXPLODED VIEW OF CHANGER (CHANGER UNIT SP-910C)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17-3
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17-2
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LUBRICATION

The Record Changer Mechanism is well lubricated before leaving the factory, however, after prolonged use, it is advisable to re-lubricate certain parts.

A medium grade grease or oil should be applied to the points shown in Fig. 12.

DO NOT TOUCH THE OUTSIDE EDGE OF THE IDLER WHEEL OR LET IT COME INTO CONTACT WITH ANY OIL OR GREASE.

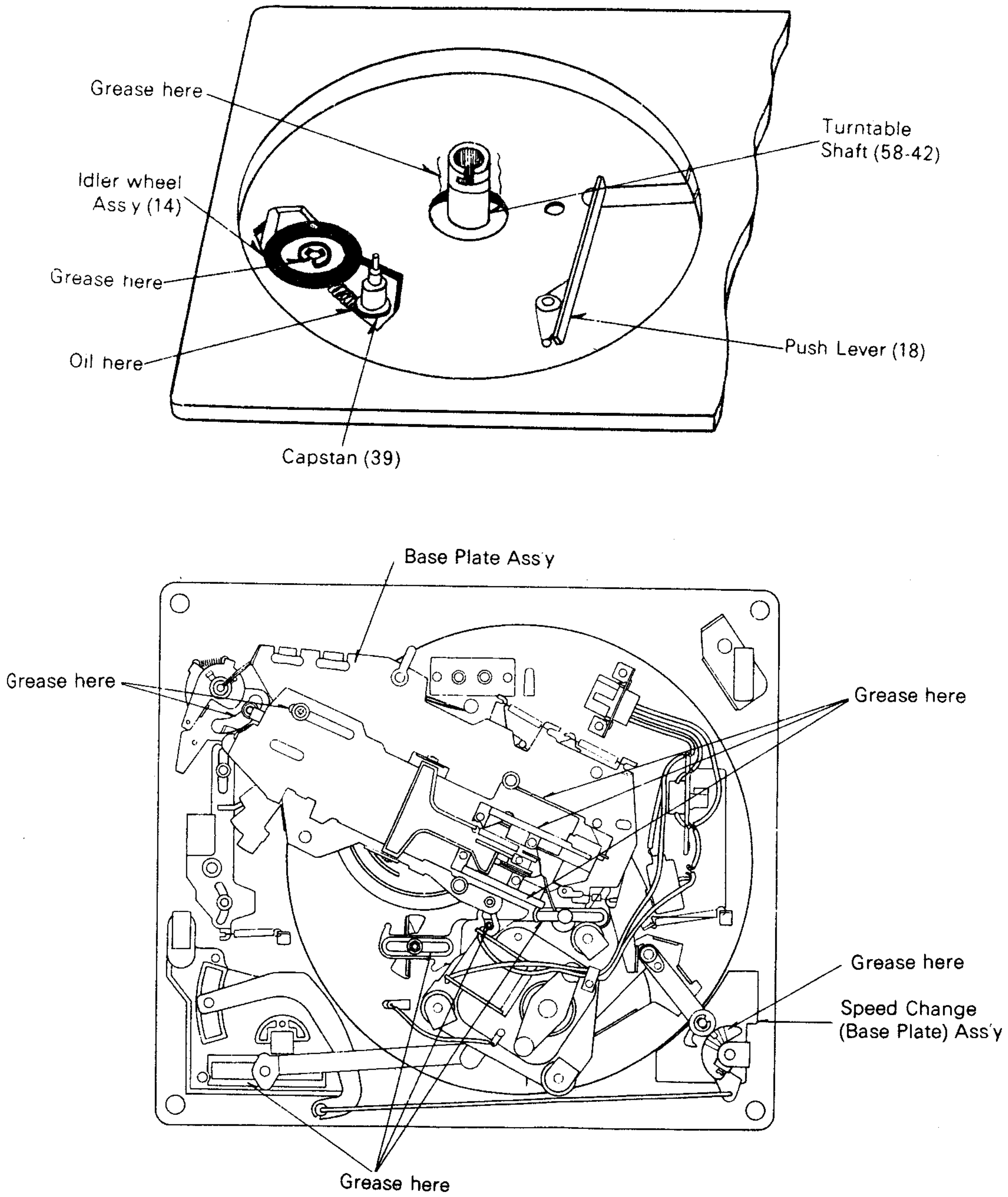
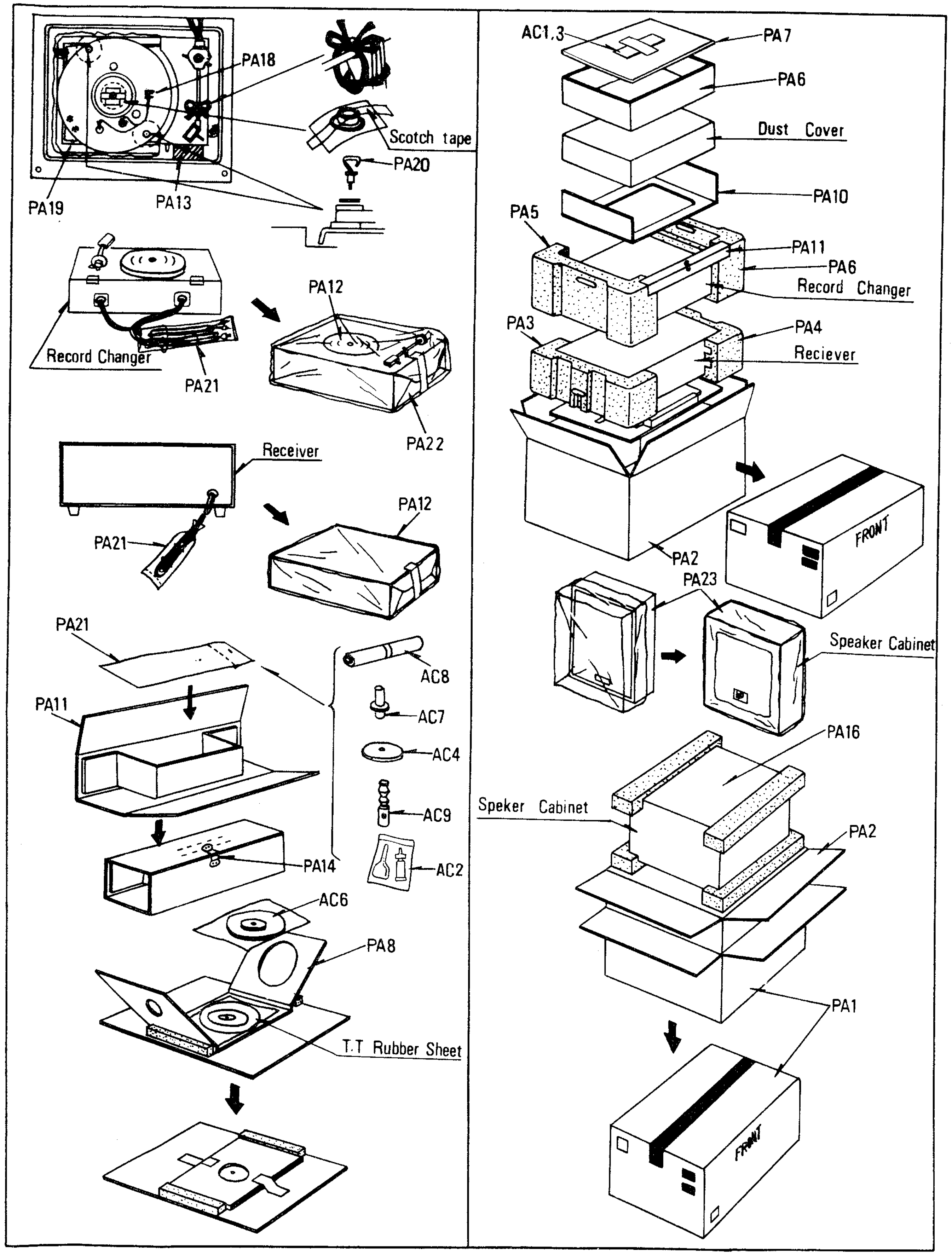

Grease here
Turntable Shaft (58-42)
Idler wheel Ass'y (14)
Grease here
Oil here
Push Lever (18)
Capstan (39)
Base Plate Ass'y
Grease here
Grease here
Grease here
Speed Change (Base Plate) Ass'y
Grease here

Fig. 12 Lubrication

COMPONENT PACKING PROCEDURE


PA18
Scotch tape
PA20
PA19
PA13
Record Changer
PA21
PA12
PA22
Receiver
PA12
PA21
PA21
PA11
AC8
AC7
AC4
AC9
PA14
AC2
AC6
PA8
T.T Rubber Sheet
AC1,3
PA7
PA6
Dust Cover
PA10
PA5
PA11
PA6
Record Changer
PA3
PA4
Reciever
PA2
PA23
FRONT
Speaker Cabinet
PA16
Speker Cabinet
PA2
PA1
FRONT

■ REPLACEMENT PARTS LIST

NOTES:

1. Part numbers indicated on most mechanical parts. Please use this Part number for parts orders
2. Ⓝ indicates the New Parts.
3. **X-Z** rank **X** rank parts will cover 80% of repair needs
   X + Y rank parts will cover 95% of repair needs
   Z rank parts are less necessary

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
		IC and TRANSISTORS		
IC201	AN217BB	FM IF & AM IF	1	X
IC301	AN211B	FM MPX	1	X
IC401, 402	SVILD3115	Equalizer Amp.	2	Ⓝ X
I 601~604	SVISTK009	Power Amp.	4	Ⓝ X
TR201	2SC1359AB	FM IF Amp.	1	X
TR301	2SB176P	FM MPX	1	X
TR302	2SC828RS	38kHz Switching	1	X
TR401, 402	2SC1328ST	Pre Amp. for FM	2	Ⓝ X
TR403	2SC1328ST	Pre Amp. for MW	1	Ⓝ X
TR451	2SC1328ST	Mic. Amp.	4	Ⓝ X
TR452	2SA666IQRS	Mic. Amp.	5	X
TR453	2SC1328ST	Mic. Amp.	4	Ⓝ X
TR501, 502	2SC1328ST	Matrix Amp.	4	Ⓝ X
TR503~506	2SA666IQRS	AF Amp.	5	X
TR571~574	2SC1328ST	Phase Shifter	4	Ⓝ X
TR701	2SB473A-S	Ripple Filter	1	X
		DIODES		
D201	MA26-2	Stabilizer	1	X
D202	0A90	Meter Diode	1	X
D203	0A90	AM Detector	1	X
D204, 205	20A79	FM Detector	2	X
D206	0A90	Temperture Compensator	1	X
D701, 702	SVD1S1850	Rectifier	2	X
D703, 704	SVD1S1850R	Rectifier	2	X
D705	SVDSD1Y	Stabilizer	1	X
D706	SVD02Z8.2A	Stabilizer	1	X
		TRANSFORMERS and COILS		
T201	EIF10S211B	FM IFT	1	X
T202	SLI45505	FM Disc.	1	X
T203	SLI7W101T	AM 1st IFT	1	Ⓝ X
T204	RLL2B415T	AM 2nd IFT	1	X
T801	SLT5P15	Power Trarsformer	1	Ⓝ X
L201	ELQ5A9	Choke Coil	1	X
L202	SLO2P5	MW OSC Coil	1	X
L203~205, 304	SLQX250-1	Choke Coil	4	X
L206	SLD4Y31	Choke Coil	1	X
L301	SLM1C21	SCA Filter	1	X
L302	SLM1C21	19kHz Pickup Coil	1	X
L801	SLH25	Choke Coil	1	Ⓝ X
L803	SLF2E7	AM Ferrite Antenna	1	Ⓝ X
L303	SLM1C21	38kHz Coil	1	X
		CIRCUIT BOARD ASSEMBLY		
B1	SXP1097	IF and MPX	1	Ⓝ X
B2	SXP1099	Pre Amp.	1	Ⓝ X
B3	SXP1101	Phase Shifter	1	Ⓝ X
B4	SXP1103	AF Amp.	1	Ⓝ X
B5	SXP1105	Power Amp. and Power Source	1	Ⓝ X
B6	SXP1107	Rear Panel	1	Ⓝ X
B7	SXP1109	Signal Connection	1	Ⓝ X
B8	SXP1111	Speaker	1	Ⓝ X
B9	SXP1113	Speaker Connection	1	Ⓝ X
B10	SWF1	FM Frontend Pack	1	Ⓝ X

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
		RESISTORS		
R201	ERD14TJ151	150Ω, 1/4W, ± 5%, Carbon	1	Z
R202	ERD14TJ101	100Ω, 1/4W, ± 5%, Carbon	1	Z
R203, 702	ERD14TJ100	10Ω, 1/4W, ± 5%, Carbon	2	Z
R204, 223, 303, 311, 401, 402, 573~576	ERD14TJ333	33kΩ, 1/4W, ± 5%, Carbon	10	Z
R205, 227, 313	ERD14VJ153	15kΩ, 1/4W, ± 5%, Carbon	3	Z
R206, 319, 320, 566, 567	ERD14TJ183	18kΩ, 1/4W, ± 5%, Carbon	5	Z
R207, 212	ERD14TJ680	68Ω, 1/4W, ± 5%, Carbon	2	Z
R208, 310	ERD14TJ273	27kΩ, 1/4W, ± 5%, Carbon	2	Z
R209, 216, 314, 315, 703	ERD14TJ332	3.3kΩ, 1/4W, ± 5%, Carbon	5	Z
R210, 211, 704	ERD14TJ102	1kΩ, 1/4W, ± 5%, Carbon	3	Z
R213, 583, 584, 595, 596	ERD14TJ684	680kΩ, 1/4W, ± 5%, Carbon	5	Z
R214, 225	ERD14TJ152	1.5kΩ, 1/4W, ± 5%, Carbon	2	Z
R215	ERD14TJ124	120kΩ, 1/4W, ± 5%, Carbon	1	Z
R217, 218	ERD14TJ223	22kΩ, 1/4W, ± 5%, Carbon	2	Z
R219, 853, 854	ERD14TJ224	220kΩ, 1/4W, ± 5%, Carbon	3	Z
R220	ERD14TJ821	820Ω, 1/4W, ± 5%, Carbon	1	Z
R221	ERD14TJ823	82kΩ, 1/4W, ± 5%, Carbon	1	Z
R222, 226, 568, 569	ERD14TJ472	4.7kΩ, 1/4W, ± 5%, Carbon	4	Z
R224, 228, 409, 410, 417, 587, 588	ERD14TJ103	10kΩ, 1/4W, ± 5%, Carbon	7	Z
R229	ERD14VJ683	68kΩ, 1/4W, ± 5%, Carbon	1	Z
R240	ERD14TJ274	270kΩ, 1/4W, ± 5%, Carbon	1	Z
R301	ERD14TJ682	6.8kΩ, 1/4W, ± 5%, Carbon	1	Z
R305, 851, 852, 855, 856	ERD14TJ122	1.2kΩ, 1/4W, ± 5%, Carbon	5	Z
R306	ERD14TJ220	22Ω, 1/4W, ± 5%, Carbon	1	Z
R307	ERD14TJ392	3.9kΩ, 1/4W, ± 5%, Carbon	1	Z
R308, 413, 414, 585, 586, 591, 592	ERD14TJ471	470Ω, 1/4W, ± 5%, Carbon	7	Z
R309, 411, 412, 418	ERD14TJ222	2.2kΩ, 1/4W, ± 5%, Carbon	4	Z
R312	ERD14TJ121	120Ω, 1/4W, ± 5%, Carbon	1	Z
R316	ERD14TJ473	47kΩ, 1/4W, ± 5%, Carbon	1	Z
R318	ERD14TJ221	220Ω, 1/4W, ± 5%, Carbon	1	Z
R321, 322, 857, 858	ERD14TJ154	150kΩ, 1/4W, ± 5%, Carbon	4	Z
R403, 404	ERD14TJ474	470kΩ, 1/4W, ± 5%, Carbon	2	Z
R405, 406	ERD12TSJ184	180kΩ, 1/2W, ± 5%, Carbon	2	Ⓝ Z
R407, 408, 416	ERD12TSJ273	27kΩ, 1/2W, ± 5%, Carbon	3	Ⓝ Z
R415	ERD12TSJ124	120kΩ, 1/2W, ± 5%, Carbon	1	Z
R419	ERD14TJ391	390Ω, 1/4W, ± 5%, Carbon	1	Z
R420	ERD14TJ271	270Ω, 1/4W, ± 5%, Carbon	1	Z
R451	ERD12TSJ124C	120kΩ, 1/2W, ± 5%, Carbon	1	Ⓝ Z
R452, 459	ERD12TSJ104C	100kΩ, 1/2W, ± 5%, Carbon	2	Ⓝ Z
R453	ERD14TJ223A	22kΩ, 1/4W, ± 5%, Carbon	1	Ⓝ Z
R454	ERD14TJ101A	100Ω, 1/4W, ± 5%, Carbon	1	Z
R455, 467	ERD14TJ563A	56kΩ, 1/4W, ± 5%, Carbon	2	Z
R456	ERD14TJ681A	680Ω, 1/4W, ± 5%, Carbon	1	Z
R457, 511~514, 518, 519, 553, 554	ERD14TJ822A	8.2kΩ, 1/4W, ± 5%, Carbon	9	Z
R458	ERD14TJ151A	150Ω, 1/4W, ± 5%, Carbon	1	Z
R460	ERD14TJ272A	2.7kΩ, 1/4W, ± 5%, Carbon	1	Ⓝ Z
R461, 557, 558	ERD14TJ152A	1.5kΩ, 1/4W, ± 5%, Carbon	3	Z
R462, 463	ERD14TJ154A	150kΩ, 1/4W, ± 5%, Carbon	2	Ⓝ Z
R464, 465, 524~531, 542~545, 547, 549	ERD14TJ472A	4.7kΩ, 1/4W, ± 5%, Carbon	16	Z
R466	ERD14TJ391A	390Ω, 1/4W, ± 5%, Carbon	1	Z
R501, 502	ERD14TJ332A	3.3kΩ, 1/4W, ± 5%, Carbon	2	Z
R503, 504	ERD12TSJ184C	180kΩ, 1/2W, ± 5%, Carbon	2	Ⓝ Z
R505, 506	ERD14TJ104A	100kΩ, 1/4W, ± 5%, Carbon	2	Z

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
R507~510, 562, 563	ERD14TJ682	6.8kΩ, 1/4W, ± 5%, Carbon	6	Z
R515, 516, 517, 520, 521, 303	ERD14TJ153	15kΩ, 1/4W, ± 5%, Carbon	6	Z
R522, 523	ERD14TJ333	33kΩ, 1/4W, ± 5%, Carbon	2	Z
R536, 537, 559, 560	ERD14TJ222	2.2kΩ, 1/4W, ± 5%, Carbon	4	Z
R538~541	ERD12TSJ105	1MΩ, 1/2W, ± 5%, Carbon	4	Ⓝ Z
R546, 548, 550, 561	ERD14TJ331	330Ω, 1/4W, ± 5%, Carbon	4	Z
R564, 565	ERD14TJ103	10kΩ, 1/4W, ± 5%, Carbon	2	Z
R577~580	ERD14TJ104	100kΩ, 1/4W, ± 5%, Carbon	4	Z
R581, 582, 593, 594	ERD12TJ474	470kΩ, 1/2W, ± 5%, Carbon	4	Ⓝ Z
R589, 590, 598, 617~620	ERD14TJ822	8.2kΩ, 1/4W, ± 5%, Carbon	7	Z
R597, 605~608	ERD14TJ562	5.6kΩ, 1/4W, ± 5%, Carbon	5	Z
R601~604	ERD14TJ470	47Ω, 1/4W, ± 5%, Carbon	4	Z
R609~612	ERX2ANJ4R7	4.7Ω, 2W, ± 5%, Metalic Film	4	Y
R613~616	ERC12GK181	180Ω, 1/2W, ±10%, Solid	4	Ⓝ Z
R701	ERD14TJ390	39Ω, 1/4W, ± 5%, Carbon	1	Z
R705	ERD12FWJ271	270Ω, 1/2W, ± 5%, Carbon	1	Ⓝ Z
R709	ERG2ANK271	270Ω, 2W, ±10%, Metalic Film	1	Ⓝ Y
R223	ERD14TJ393	39kΩ, 1/4W, ± 5%, Carbon	1	Z

CAPACITORS

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
C201, 313, 314, 415~420, 425, 426, 427, 625~628	ECEA50V1L	1μF, 50V, Electrolytic	16	Y
C202, 310, 401, 402	ECEA16V10L	10μF, 16V, Electrolytic	4	Y
C203, 204	ECKE1H103PF	0.01μF, 50V, $^{+100}_{-0}$%, Ceramic	2	Z
C205	ECCD1H020C	2pF, 50V, ±0.25pF, Ceramic	1	Z
C206, 311, 405, 406, 421, 422, 428, 609~612	ECKE1H102MD	0.001μF, 50V, ±20%, Ceramic	11	Z
C207, 208, 211, 214, 225, 228, 229, 231, 312, 320	ECKE1H103MD	0.01μF, 50V, ±20%, Ceramic	10	Z
C209, 224, 307	ECEA25V3R3L	3.3μF, 25V, Electrolytic	3	Y
C210, 301, 308	ECEA6V100L	100μF, 6V, Electrolytic	3	Y
C213, 319	ECEA10V47L	47μF, 10V, Electrolytic	2	Y
C215, 305	ECEA25V4R7L	4.7μF, 25V, Electrolytic	2	Y
C216	ECCD1H080D	8pF, 50V, ±0.5pF, Ceramic	1	Z
C217, 238	ECKE1H333PF	0.033μF, 50V, $^{+100}_{-0}$%, Ceramic	2	Z
C218	ECCD1H120K	12pF 50V, ±10%, Ceramic	1	Z
C302	ECQS1391JZ	390pF, 100V, ± 5%, Polyethylene	1	Z
C221	ECQG05683KZ	0.068μF, 50V, ±10%, Polyester	1	Z
C222, 318	ECKE1H223MD	0.022μF, 50V, ±20%, Ceramic	2	Z
C223	ECCD1H680K	68pF, 50V, ±10%, Ceramic	1	Z
C230, 423, 424, 429	ECEA6V33L	33μF, 6V, Electrolytic	4	Y
C303	ECQS1472KZ	4700pF, 100V, ±10%, Polyethylene	1	Z
C304, 705	ECEA10V220L	220μF, 10V, Electrolytic	2	Y
C306	ECQS1102KZ	1000pF, 100V, ±10%, Polyethylene	1	Z
C309	ECEA6V47L	47μF, 6V, Electrolytic	1	Y
C315	ECAG25ER68L	0.68μF, 25V, Electrolytic	1	Z
C316, 317	ECQG05152KZ	0.0015μF, 50V, ±10%, Polyester	2	Z
C403, 404	ECEA16V100L	100μF, 16V, Electrolytic	2	Y
C407, 408	ECQG05222KZ	0.0022μF, 50V, ±10%, Polyester	2	Z
C409, 410	ECEA16V33L	33μF, 16V, Electrolytic	2	Y
C411, 412	ECCD1H470K	47pF, 50V, ±10%, Ceramic	2	Z
C413, 414	ECQG05682KZ	0.0068μF, 50V, ±10%, Polyester	2	Z
C431	ECEA16V220L	220μF, 16V, Electrolytic	1	Y
C451, 453	ECEA16V10LF	10μF, 16V, Electrolytic	2	Y
C452, 460, 503, 504, 521~524	ECKC1H102MD	0.001μF, 50V, ±20%, Ceramic	8	Z
C454	ECEA16V220L	220μF, 16V, Electrolytic	1	Y
C455	ECCC1H330K	33pF, 50V, ±10%, Ceramic	1	Z
C456	ECEA6V33LF	33μF, 6V, Electrolytic	1	Y
C457	ECAG25ER47LF	0.47μF, 25V, Electrolytic	1	Y
C458	ECEA25V10LF	10μF, 25V, Electrolytic	1	Ⓝ Y
C459	ECEA6V100LF	100μF, 6V, Electrolytic	1	Ⓝ Y
C501, 502, 505~508 525, 527	ECEA50V1LF	1μF, 50V, Electrolytic	8	Y
C509~512	ECQG05102KZB	0.001μF, 50V, ±10%, Electrolytic	4	Y
C513~516	ECQG05683KZ	0.068μF, 50V, ±10%, Electrolytic	4	Y
C517~520	ECAG25ER68LF	0.68μF, 25V, Electrolytic	4	Y
C529, 530 571, 573	ECQG05472KZ	0.0047μF, 50V, ±10%, Electrolytic	4	Y
C531~534	ECQG05223KZ	0.022μF, 50V, ±10%, Polyester	4	Z
C535, 536	ECAG25ER22LF	0.22μF, 25V, Electrolytic	2	Y
C537	ECEA25V220L	220μF, 25V, Electrolytic	1	Y
C538	ECEA10V220L	220μF, 10V, Electrolytic	1	Y
C572, 574	ECKD2H681KB	680pF, 500V, ±10%, Ceramic	2	Z
C575, 577	ECQG05153KZ	0.015μF, 50V, ±10%, Polyester	2	Z
C576, 578	ECQG05332KZ	0.0033μF, 50V, ±10%, Pblyester	2	Z
C579~582	ECEA50V1L	1μF, 50V, Electrolytic	4	Y
C583, 584	ECAG25ER47L	0.47μF, 25V, Electrolytic	2	Y
C706	ECEA16V47L	47μF, 16V, Electrolytic	1	Y
C601~604	ECAG25ER1L	1μF, 25V, Electrolytic	4	Y
C605~608	ECEA25V100L	100μF, 25V, Electrolytic	4	Y
C613~616	ECEA25V10L	10μF, 25V, Electrolytic	4	Y
C617~620	ECEA25V47L	47μF, 25V, Electrolytic	4	Y
C621~624	ECEA25V33L	33μF, 25V, Electrolytic	4	Y
C629~632	ECEA25V1000L	1000μF, 25V, Electrolytic	4	Ⓝ Y
C633~636	ECQG05473KZ	0.047μF, 50V, ±10%, Polyester	4	Z
C637~640, 701	ECQG05104KZ	0.5μF, 50V, ±10%, Polyester	5	Z
C702	ECET25R3300	3300μF, 25V, Electrolytic	1	Y
C703	ECKE1H103MD	0.01μF, 50V, ±20%, Ceramic	1	Z
C704, 707	ECEA25V470L	470μF, 25V, Electrolytic	2	Y
C219	ECQS1371JZ	370pF, 100V, ± 5%, Polyethylene	1	Z

VARIABLE RESISTORS

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
R302	EVLS3AA00B15	38kHz Sub Ch. Carrier Leak Control	1	Y
R304	EVLS3AA00B53	Separatior Control	1	Y
R317	EVLS3AA00B54	Lighting Level Control	1	Y
R532~535	EVB82AK255B4	Loudness Volume	1	Ⓚ Ⓝ Y
R551, 552, 555, 556	EVFN0AK25A54	Tone Control Volume	2	Ⓚ Ⓝ Y
R801	EVHS8A25KA24	Mic. Volume	1	Ⓚ Ⓝ Y
R803~806	EVHB8A019A54	4CH Volume	4	Ⓝ Y

CERAMIC FILTERS

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
CF201, 202	RVFCF10M12CW	Ceramic Filter 10.7MHz	2	Y

COMPONENT COMBINATIONS

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
Z201	EXAF203Z471	AM Detector	1	Z
Z202	EXA5DL01C	FM Detector	1	Z
Z301, 302	SXAM675F	19kHz Filter	2	Ⓝ Z

SWITCHES

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
S1-1~S1-6	SSR7K	Selector Switch	1	Ⓚ Ⓝ Y
S2-1~S2-4	SST27-1S	Tape Monitor Switch	1	Ⓝ Y
S3-1~S3-10	SSR9K	Mode Switch	1	Ⓚ Ⓝ Y
S4-1~S4-4	SST27-1S	Loudness Control Switch	1	Ⓝ Y
S5-1~S5~8	ESRE394K40AE	Speaker Change Switch	1	Ⓚ Ⓝ Y
S7	SWS19	Power Source Switch	1	Y

CHASSIS PARTS

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
CH1	XBA2K12NS5	Primary Fuse, 250V 1.2A	2	X
CH2	XBAS2B0501	Secondary Fuse, 250V 0.5A	1	X
CH3	XBAS1B2502	Secondary Fuse, 250V 2.5A	1	X
CH4	SSM17-1	Tuning Meter	1	X
CH5	SYP1	4CH Indicator	1	X
CH6	XAMR21S350	Dial Indicator Lamp 6.3V 75mA	1	X
CH7	XAM35K	Dial & Meter Lamp 6.3V 250mA	6	X
CH8	XAM13T180	Stereo Eye Lamp 3V 40mA	1	X
CH9	SSP19S	Voltage Adjust Switch	1	X
CH10	SJJ17-2	Headphone Jack	2	X
CH11	SJJ31	Microphone Jack	1	X
CH12	RJV1A	Lamp Holder, A (CH7)	1	Z
CH13	SJS9205	AC Socket	1	Z
CH14	SJS5309	Player Power Source Socket	1	Z
CH15	SHG1081	Rubber Stereo Eye	1	Z

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
CH16	SJV1	Lamp Holder, B	1	Z
CH17-1	SDP1067	Dial Pointer	1	Ⓝ Y
CH17-2	SDA51		1	
CH17-3	SHG1117-1		1	
CH17-4	XAMR21S350		1	
CH18	RDZ05-5	Dial Cord	72"	X
CH19	SDD39S	VC Dram	1	Z
CH20	SDS411-1	Spring, VC Drum	1	Z
CH21	SDT9321KS	Tuning Shaft	1	Ⓝ Z
CH22	SXE523	Roller, A	1	Ⓝ Z
CH23	SXE525	Roller, B	1	Ⓝ Z
CH24	SXE467-1	Roller, C	1	Z
CH25	SDR5	Roller, D	4	Z
	SDY5			
CH26	SMC359	Shield Plate for IC	1	Ⓝ Z
CH27	SMY159	Heat Sink Plate	1	Z
CH28	SMY191	Heat Sink Plate	1	Ⓝ Z
CH29	XTB3+8CFZ	Screw, Rear Panel	10	Z
CH30	SJS5505	Lead Socket, P301	1	Z
	SJS41		5	
CH31	SJS5505	Lead Socket, P501, 601	2	Z
	SJS41		10	
CH32	SJS5307	Lead Socket, P502, 701	2	Z
	SJS41		4	
CH33	SJS5505	Lead Socket, P503, 504, 505, 602	4	Z
	SJS41		20	
CH34	SJA33	AC Cord	1	Z
CH35	RHR111	Cord Bushing	1	Z
CH36	XSN4+20FVCS	Screw, Chassis Holding	5	Z
CH37	XTV3+12C	Screw, Chassis Holding	1	Z
CH38	XTB3+8CFZ	Screw, Rear Panel	10	Z

CABINET PARTS

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
CA1	SKA5211	Cabinet (wooden)	1	Ⓝ Z
CA2	SYE259	Control Panel Ass'y	1	Ⓝ Z
CA2-1	SGW4550	Panel, A	(1)	Ⓝ Z
CA2-2	SGW4570	Panel, B	(1)	Ⓝ Z
CA2-3	SDE151	Smoked Panel	(1)	Ⓝ Z
CA2-4	XNK2UM	Speed Nut	(4)	Z
CA2-5	SGB353	Badge	(1)	Ⓝ Z
CA2-6	SHR551	Sheet	(4)	Z
CA3	SBN377K	Knob, Tuning	1	Ⓝ X
CA4	SBN379K	Knob, Volume	4	Ⓝ X
CA5	SBN381	Knob, Balance Volume	4	Ⓝ X
CA6	SBN383K	Knob, Selector Switch	3	Ⓝ X
CA7	SKD1830	Dial Panel	1	Ⓝ X
CA8	SNE439	Ornamental Nut	3	Z
CA9	SGT7011	Specifications Plate	1	Ⓝ Z

SPEAKER PARTS (Mobel SB-150A)

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
SP1	SKA5270	Cabinet (wooden)	2	Ⓝ X
	SGW4630	Grill (with Badge)	(2)	X
	SGS213-3	Net	(2)	Z
	SKZ329	Rear Board (without speaker terminal)	(2)	Z
SP2	SAS16PL001S	Speaker, Woofer	2	Z
SP3	EAS65PH34SD	Speaker, Tweeter	2	Z
SP4	SGT6850	Specifications Plate	2	Ⓝ Z
SP5	SJP2109	Speaker Cord	2	Z
SP6	XMS31+20FVC	Screw, Rear Board	20	Z
SP7	XNG3BS	Nut, Speaker	12	Z
SP8	SMN451	Terminal Plate	2	Z
	SJF3101		2	
	SNE905		4	
	XSN3+20FVCS		4	
	XWG3FVC		4	
	XWA3B		4	
SP9				

PLAYER PARTS (Model SL-710)

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
PL1	SKA5231	Player Cabinet	1	Ⓝ Z
PL2	SKU3970	Bottom Board	1	Z
	SUV213		1	Z
	SNE905-2		4	Z
PL3	SHG351	Leg	4	Z
PL4	XSN3+20S	Screw, Leg	4	Z
PL5	XNG3BS	Nut, Leg	4	Z
PL6	SJP2221	Pickup Lead	1	Z
PL7	SWY51	Player Power Source Lead	1	Z
PL8	SGT6790	Specifications Plate	1	Ⓝ Z
PL9	SBH9055	Hinge for Cabinet	2	Z
PL10	SYE247-1	Dust Cover (with hinge)	1	Ⓝ Y
PL11	SUV163S	Hole Cover	1	Z
PL12	SHR113	Cord Bushing, A	1	Z
PL13	SHR937	Cord Bushing, B	1	Z
PL14	SMN943S	Bushing Holder, A	1	Z
PL15	SMN517S	Bushing Holder, B	1	Z
PL16	SHR9067	Spring Holder	3	Z
PL17	XMM31+13FVC	Screw, Bottom Board	10	Z
PL18	SGB357	Badge	1	Ⓝ Z
1	SFVS910-1Z	Automatic Spindle	1	X
3	SFTG910C1A	Turntable Mat	1	X
5	SFTE910-1E	Turntable Ass'y	1	Z
6	EPU-36SMAD	Pickup Arm Ass'y	1	Z
7~10, 20	SFKR910-1A	Lift Ass'y	1	Y
14	SFMI910A01E	Idler Wheel Ass'y	1	X
39, 40	SFMC910-$\substack{5\\6}$	Capstan $\left\{\substack{\text{for 50Hz}\\\text{for 60Hz}}\right\}$	1	X
50	SFDSAM320039	Switch	1	X
49, 51, 52	SFDA910A1	AC Plug Ass'y	1	Y
54	4M-15VPL	Motor Ass'y	1	X
72	SFVA910-10	45r.p.m. Manual Spindle	1	X
73	SFVS910-17	Manual Spindle	1	X
77	SFKD910A01Z	Balancer	1	X
	EPC82SMBD	Cartridge	1	X
	EPS31STAD	Stylus, Diamond	1	X

PACKING PARTS

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
PA1	SPG401	Packing Case, Outside (Center)	1	Ⓝ Z
PA2	SPN3719	Packing Case, Inside (Center)	1	Ⓝ Z
PA3	SPN3739	Side Pad, Left	1	Ⓝ Z
PA4	SPN3741	Side Pad, Right	1	Ⓝ Z
PA5	SPN3743	Side Pad, Player Left	1	Ⓝ Z
PA6	SPN3745	Side Pad, Player Right	1	Ⓝ Z
PA7	SPN3731	Top Pad	1	Ⓝ Z
PA8	SPN3735	Bottom Pad	1	Ⓝ Z
PA9	SPN3733	Carton, Dust Cover	1	Ⓝ Z
PA10	SPN3737	Protection Pad, Player	1	Ⓝ Z
PA11	SPN3753	Accessory Case	1	Ⓝ Z
PA12	SPPH7	Polyethylene Bag, Center Unit	2	Z
PA13	SPE59	Lever Clamper	1	Z
PA14	SPE17	Case Clamper	2	Z
PA15	SPG403	Outside Packing Case, Speaker	1	Ⓝ Z
PA16	SPH77	Partition, Speaker	1	Ⓝ Z
PA18	SFHK910-01	Screw, Motor Holding	2	Z
PA19	SFHS910A03	Spacer, T.T.	2	Z
PA20	SFHK910-02	Screw, T.T. Holding	2	Z
PA21	SPB1045	Protection Cover	2	Z
PA22	SPP61-1	Protection Bag	1	Z
PA23	SPP93	Polyethylene Bag, Speaker	1	Z
PA24	SPG403	Packing Case, Outer (Speaker)	1	Z
PA25	SPN3721	Packing Case, Inner (Speaker)	1	Z
PA26	SPP291	Protection Sheet	1	Z

ACCESSORIES

Ref. No.	Part No.	Description	Per Set (Pcs.)	Remarks
AC1	SGF525-1	Printed Matter	1	Ⓝ Y
	SGX5293	Instruction Book (Order SQF525-1)	(1)	Ⓝ Y
	SQX9013-1	Factory Servicenters List (Order SQF525-1)	(1)	Y
	SQX185	Schematic Diagram (Order SQF525-1)	(1)	Ⓝ Y
AC2	SPB445	Technical Matter	1	Y
	SPB5001	Machine Oil (Order SPB445)	(1)	Y
	SPB5003	Grease (Order SPB445)	(1)	Y
AC3	SPB299-5	Felt, Speaker	2	Y
AC4	SFVA910-10	45r.p.m. Manual Spindle	1	X
AC5	SJP2109	Speaker Cord	2	Y
AC6	SFKD910A 01 Z	Balancer	1	X
AC7	SFVS910-17	Manual Spindle	1	X
AC8	SFVS910-1Z	Auto Spindle	1	X
AC9	SFMC910-$\substack{5\\6}$	Capstan $\left\{\substack{\text{for 50Hz}\\\text{for 60Hz}}\right\}$	1	X